Welcome: A Few Things to Note

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1. Participants will be muted upon entry and videos turned off
2. For technical assistance, please use the chat feature
3. You will receive an email approximately 1 month requesting feedback/impact on this presentation
4. Visit www.nceedus.org/training to view other training opportunities

NCEED Grant Statement
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Signs and Symptoms: Presenting Features of Eating Disorders

Stephanie N. Ferrin, MD, MS

Disclosure

- I have no financial interests or relationships to discuss

Objectives

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Following this presentation, attendees should be able to:

- Describe the diagnostic criteria for the most common eating disorders
- Review the common presenting symptoms and features of eating disorders
- Identify the risk factors for the development of eating disorders
- Discuss changing prevalence rates and presentations of eating disorders

Elusive but Impactful

- Eating disorders often present in varied ways as a "great pretender" of the 21st century
- Eating disorders have a greater prevalence than childhood diabetes or schizophrenia
  - 0.3% prevalence of childhood diabetes vs 1.5-2% prevalence of an eating disorder in adolescence
- Eating disorders have the highest mortality rate of any psychiatric disorder
  - Mortality rate of anorexia nervosa approaches 10%

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The Eating Spectrum

Restrictive

Expansive

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"Purging Disorder"

Anorexia Nervosa-Restrictive

Binge Eating Disorder

"Orthorexia"

Anorexia Nervosa-Binge/Purge

Bulimia Nervosa

"Night Eating Syndrome"

Avoidant/Restrictive Food Intake Disorder

Other Specified and Unspecified Feeding And Eating Disorder

Risk Factors

- Eating disorders often develop in younger individuals during periods of development
- Eating disorders may develop from an attempt to manage challenges in life
- Eating disorders may be an attempt to assert control over themselves when other aspects of life can not be controlled

- Risk factors are probabilistic, not deterministic.

Biopsychosocial Model

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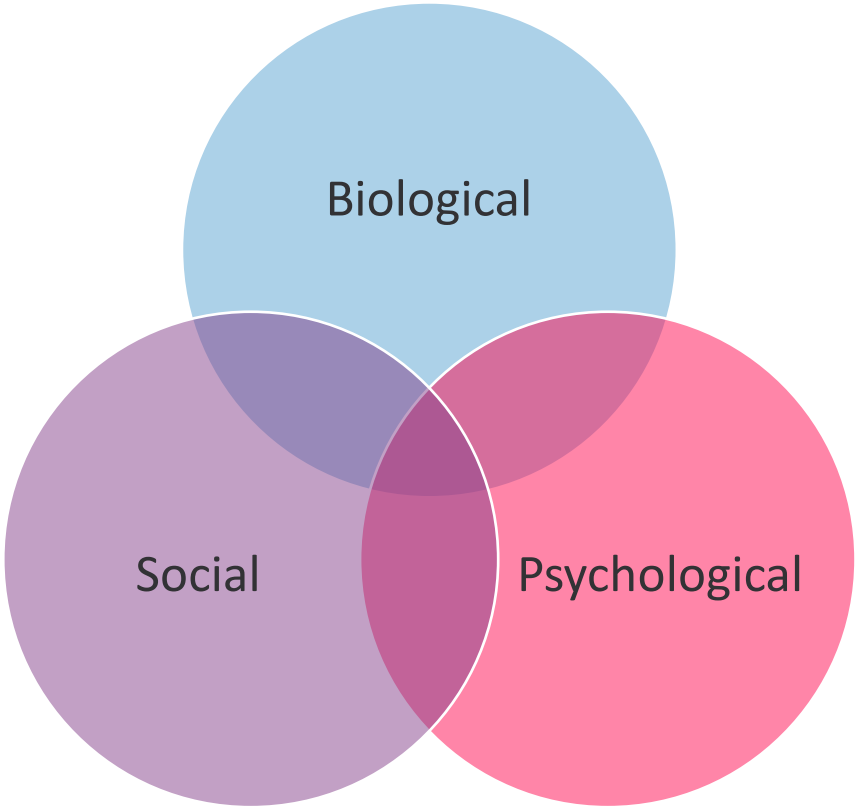

Biopsychosocial Model

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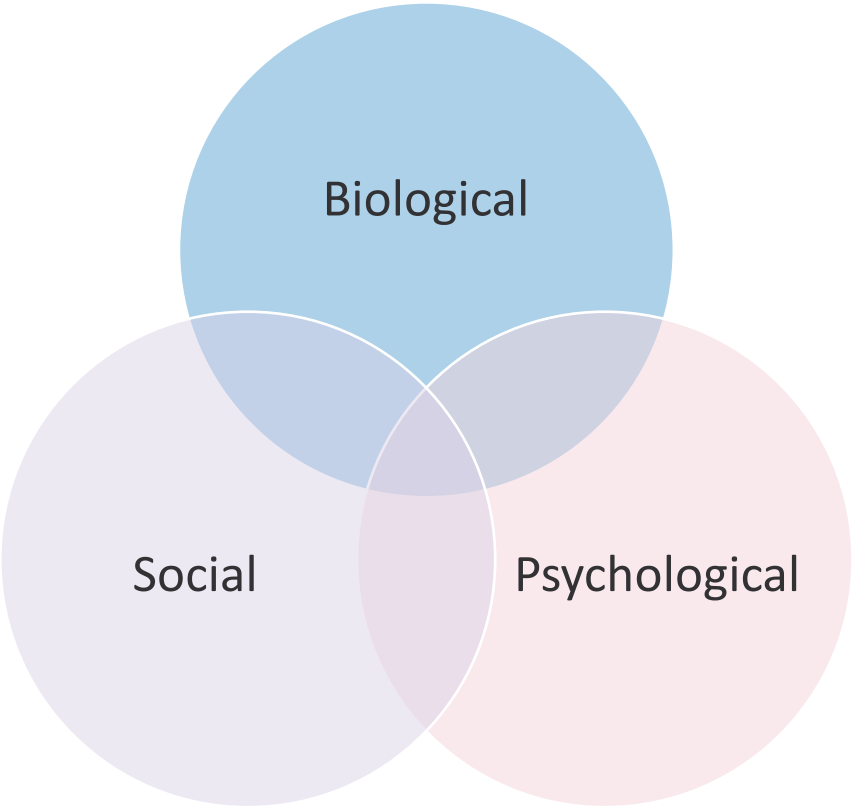

Biological Risks

Risk Factor	Comments
Genetics/Heritability	-Increased risk in those with first degree relative -Increased among monozygotic twins as compared to dizygotic twins

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Biological Risks

Risk Factor	Comments
Genetics/Heritability	
Age	-Peaks at ages 12-16 for anorexia nervosa -Peaks at ages 17-21 for bulimia nervosa -Cases present from 7 to 77 years old

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Biological Risks

Risk Factor	Comments
Genetics/Heritability	
Age	
Sex/Gender	-10:1 female to male in clinical referrals -2-3:1 female to male in community sample -Transgender and gender diverse individuals

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Special Group: Transgender and Gender Diverse

Risk factors specific to those with gender dysphoria that increase vulnerability to the development of eating disorders:

- Public discrimination and negative attitudes towards gender diverse individuals
- Body image distress concerning pre-transitioning body size and shape
- Idealized expectations for a post-transition body image

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Biological Risks

Risk Factor	Comments
Genetics/Heritability	
Age	
Sex/Gender	
Predisposing Medical Disorders	-Malabsorptive states -Endocrinopathies -Medications that affect weight -Unexplained GI complaints

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Special Group: Comorbid Medical Disorders

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- Malabsorptive States
  - Cystic Fibrosis
  - Inflammatory Bowel Disease
  - Celiac Disease

Special Group: Comorbid Medical Disorders

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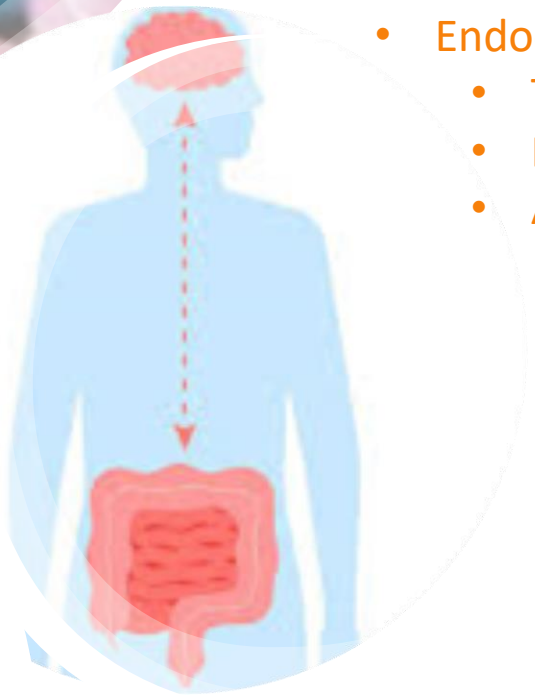
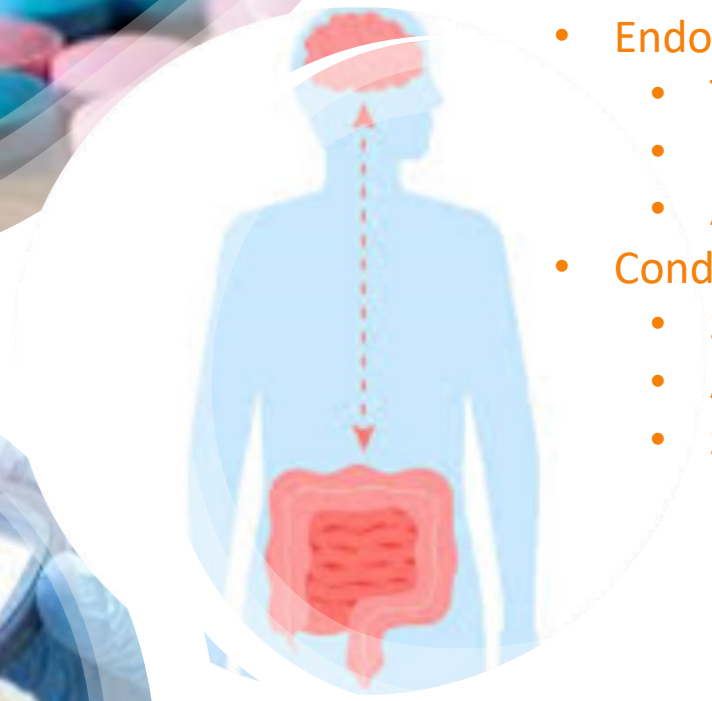
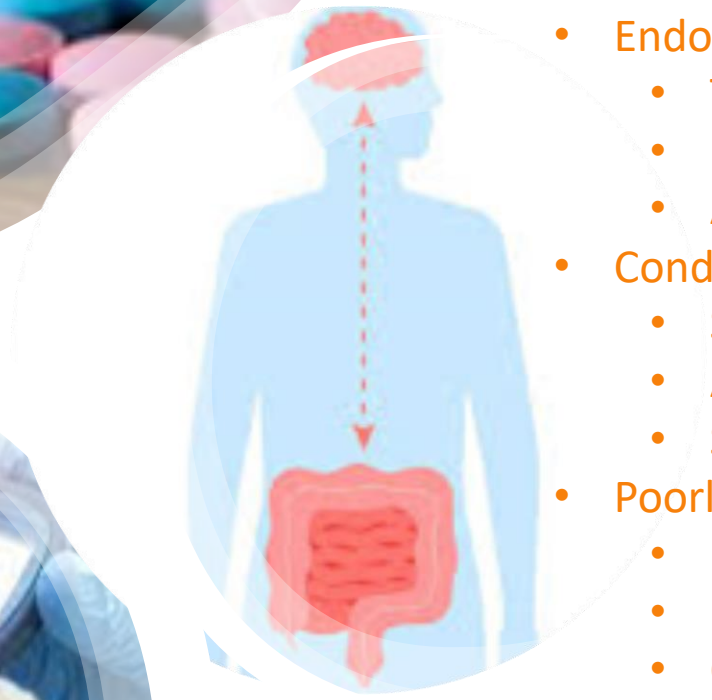
- Malabsorptive States
  - Cystic Fibrosis
  - Inflammatory Bowel Disease
  - Celiac Disease
- Endocrinopathies
  - Thyroid Disorders
  - Diabetes
  - Adrenal Insufficiency





Special Group: Comorbid Medical Disorders

- Malabsorptive States
  - Cystic Fibrosis
  - Inflammatory Bowel Disease
  - Celiac Disease
- Endocrinopathies
  - Thyroid Disorders
  - Diabetes
  - Adrenal Insufficiency
- Conditions with medications that affect weight
  - Steroids
  - Atypical Antipsychotics
  - Stimulant Medications



Special Group: Comorbid Medical Disorders

- Malabsorptive States
  - Cystic Fibrosis
  - Inflammatory Bowel Disease
  - Celiac Disease
- Endocrinopathies
  - Thyroid Disorders
  - Diabetes
  - Adrenal Insufficiency
- Conditions with medications that affect weight
  - Steroids
  - Atypical Antipsychotics
  - Stimulant Medications
- Poorly defined or unexplained gastrointestinal complaints
  - Disorders of gut-brain interaction
  - Median arcuate ligament syndrome
  - Chronic vomiting

Biopsychosocial Model

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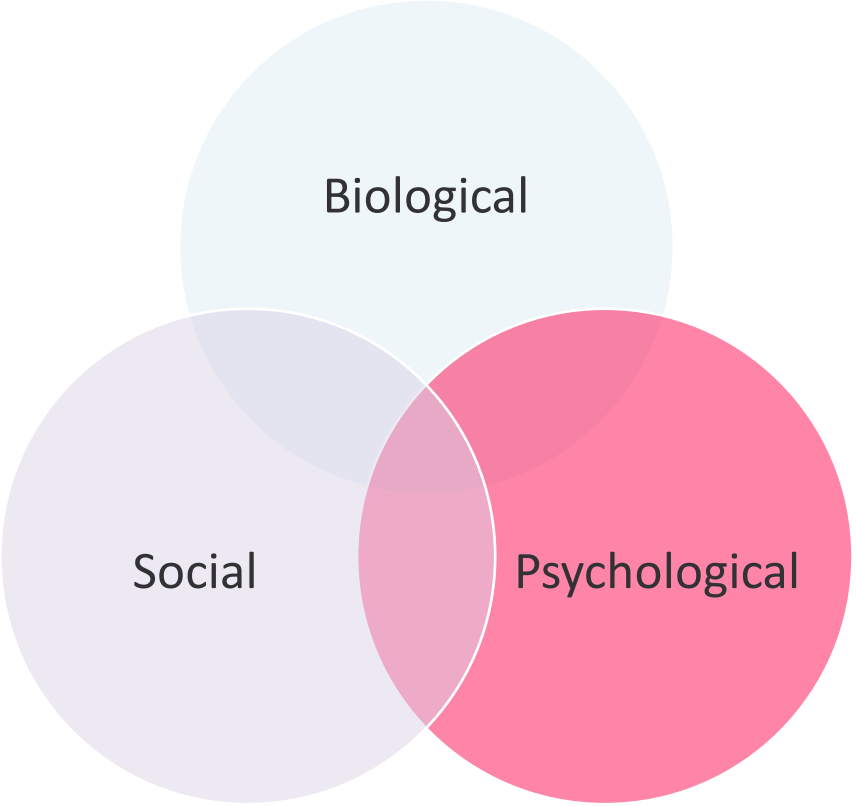

Psychological Risks

Risk Factor	Comments
Predisposing psychiatric disorders	-Depressive disorders -Anxiety disorders -Obsessive-compulsive disorder -Autism spectrum disorders -Attention deficit/hyperactivity disorder

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Special Group: Intellectual Disabilities and Neurodivergent

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- Mild intellectual disability
- Autism Spectrum Disorders
- Attention Deficit/Hyperactivity Disorder

Psychological Risks

Risk Factor	Comments
Predisposing psychiatric disorders	
Trauma	-PTSD -Sexual Assault -Adverse Childhood Experiences

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Psychological Risks

Risk Factor	Comments
Predisposing psychiatric disorders	
Trauma	
Substance Use Disorders*	-hereditable link between alcohol use disorder and bulimia nervosa

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Special Group: Substance Use Disorders

- A study by Baker and colleagues found that there is an association between childhood sexual abuse and the development of comorbid bulimia nervosa and substance use disorders
- A study by Corstorphine and colleagues found an association between a history of childhood sexual abuse, substance use disorders, and impulsivity in patients with eating disorders
- Other factors that impact the risk of development of substance use disorders and eating disorders include:
  - poor paternal education
  - close maternal relationship
  - SUD or ED behavior modeling
  - maternal concern about weight loss and appearance

Special Group: Substance Use Disorders

- Approximately 12% to 18% of adults with anorexia nervosa and 30% to 70% of adults diagnosed with bulimia nervosa bulimia nervosa have a substance use disorder
- Women with eating disorders are more likely to abuse substances than women with no eating disorders.
- One-fourth of individuals with binge eating disorder reported a comorbid substance use disorder
- Men with binge eating disorder have higher rates of substance use disorder when compared to women

Special Group: Substance Use Disorders

Several studies in adolescents found that approximately:

- 2/3 of those with bulimia nervosa have used alcohol
- 1/3 of those with bulimia nervosa have used cigarettes at least once
- 1/3 of those with bulimia nervosa have used illegal drugs at least once

Marijuana >> Cocaine > Amphetamines

Psychological Risks

Risk Factor	Comments
Predisposing psychiatric disorders	
Trauma	
Substance Use Disorders*	
Temperament/Personality	-Anorexia nervosa: perfectionist, obsessional, self-critical -Bulimia nervosa: impulsive, mood lability, dramatic features -Binge eating disorder: high harm avoidance, conflict avoidance, low self-directedness

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Psychological Risks

Risk Factor	Comments
Predisposing psychiatric disorders	
Trauma	
Substance Use Disorders*	
Temperament/Personality	
Poor processing and regulation	-Poor coping skills -Emotional Dysregulation -Poor self esteem -Body dissatisfaction

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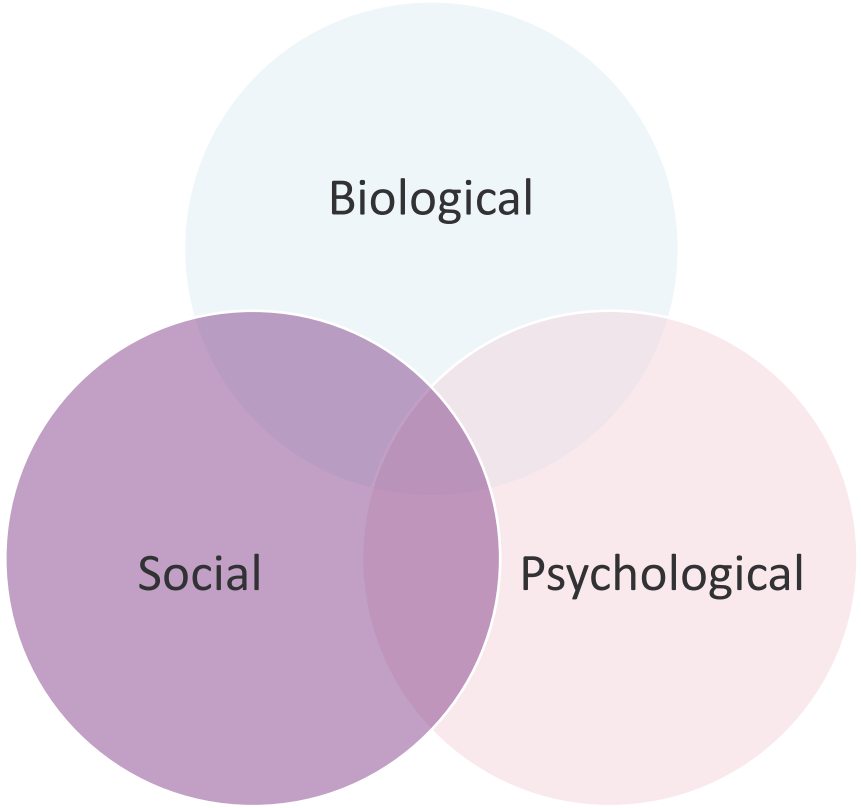
Biopsychosocial Model



Social Risks

Risk Factor	Comments
Geography	-Higher incidence in westernized countries -More common in upper socioeconomic groups -More common in urban than rural areas

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Social Risks

Risk Factor	Comments
Geography	
Racial and Ethnic groups	-Highly variable according to cultural norms and socioeconomic factors -increased in African Americans of higher socioeconomic status

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Social Risks

Risk Factor	Comments
Geography	
Racial and Ethnic groups	
Interest Groups	-Actors -Media professionals -Military personnel -Athletes

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Special Group: Athletes

- Strict dance schools
- Bodybuilders
- Wrestlers
- Gymnastics
- Figure skating
- Cross country runners
- Swimmers

Social Risks

Risk Factor	Comments
Geography	
Racial and Ethnic groups	
Interest Groups	
Family Environment	-Family's weight related norms -Household culture around eating and food

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Social Risks

Risk Factor	Comments
Geography	
Racial and Ethnic groups	
Interest Groups	
Family Environment	
Peer Group	-Peer Pressure -Bullying

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Social Risks

Risk Factor	Comments
Geography	
Racial and Ethnic groups	
Interest Groups	
Family Environment	
Peer Group	
Influence of Media	-Unrealistic body ideals portrayed in media -Onset of eating disorders with introduction of TV and other media -Pro-ANA and Pro-MIA sites -”Thinspiration”

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Social Risk Factors: Excerpts

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- The best-known environmental contributor to the development of eating disorders is the sociocultural idealization of thinness.

Culbert, K. M., Racine, S. E., & Klump, K. L. (2015). Research Review: What we have learned about the causes of eating disorders - a synthesis of sociocultural, psychological, and biological research. J Child Psychol Psychiatry, 56(11), 1141-1164.

- 79% of weight-loss program participants reported coping with weight stigma by eating more food.

Andreyeva, T., Puhl, R. M. and Brownell, K. D. (2008), Changes in Perceived Weight Discrimination Among Americans, 1995–1996 Through 2004–2006. Obesity, 16: 1129–1134. doi:10.1038/oby.2008.35

- Up to 40% of overweight girls and 37% of overweight boys are teased about their weight by peers or family members. Weight teasing predicts weight gain, binge eating, and extreme weight control measures.

Golden, N. H., Schneider, M., & Wood, C. (2016). Preventing Obesity and Eating Disorders in Adolescents. Pediatrics, 138(3). doi:10.1542/peds.2016-1649

Social Risk Factors: Excerpts

- Weight-based victimization among overweight youths has been linked to lower levels of physical activity, negative attitudes about sports, and lower participation in physical activity among overweight students. Among overweight and obese adults, those who experience weight-based stigmatization engage in more frequent binge eating, are at increased risk for eating disorder symptoms, and are more likely to have a diagnosis of binge eating disorder.

Andreyeva, T., Puhl, R. M. and Brownell, K. D. (2008), Changes in Perceived Weight Discrimination Among Americans, 1995–1996 Through 2004–2006. Obesity, 16: 1129–1134. doi:10.1038/oby.2008.35

- Multiple studies have found that dieting was associated with greater weight gain and increased rates of binge eating in both boys and girls.

Golden, N. H., Schneider, M., & Wood, C. (2016). Preventing Obesity and Eating Disorders in Adolescents. Pediatrics, 138(3). doi:10.1542/peds.2016-1649

Eating Disorders

- Pica
- Rumination Syndrome
- Avoidant/Restrictive Food Intake Disorder
- Anorexia Nervosa
- Bulimia Nervosa
- Binge-Eating Disorder
- Other Specified Feeding or Eating Disorder
- Unspecified Feeding or Eating Disorder

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Epidemiology of Eating Disorders

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Anorexia Nervosa

Lifetime Prevalence Females: 0.9%

Lifetime Prevalence Males: 0.3%

Anorexia Nervosa

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1.) Restriction of energy intake relative to requirements leading to a significantly lower body weight in the context of age, sex, and developmental trajectory.

2.) Intense fear of gaining weight or of becoming fat ("fat phobia"), or persistent behavior that interferes with weight gain

3.) Disturbance in the way one's body weight or shape is experienced, undue influence of body weight or shape on self-evaluation, or persistent lack of recognition of the seriousness of the current low body weight

Amenorrhea is no longer a criteria for diagnosis of anorexia nervosa

What is a Significantly Low Body weight?

- Significantly low body weight is defined as weight that is less than minimally normal, or less than minimally expected in adolescents and children
- For adults: CDC and WHO considers BMI <17 kg/m² or BMI<18.5 kg/m² if supportive clinical history or other physiologic information
- For children and adolescents: a BMI-for-age < 5th percentile or BMI greater than this but with failure to maintain expected growth trajectory
- Severity is measured in BMI or corresponding BMI percentiles:
  - Mild BMI ≥17
  - Moderate BMI 16-16.99
  - Severe BMI 15-15.99
  - Extreme BMI <15

Manifestations of Anorexia Nervosa

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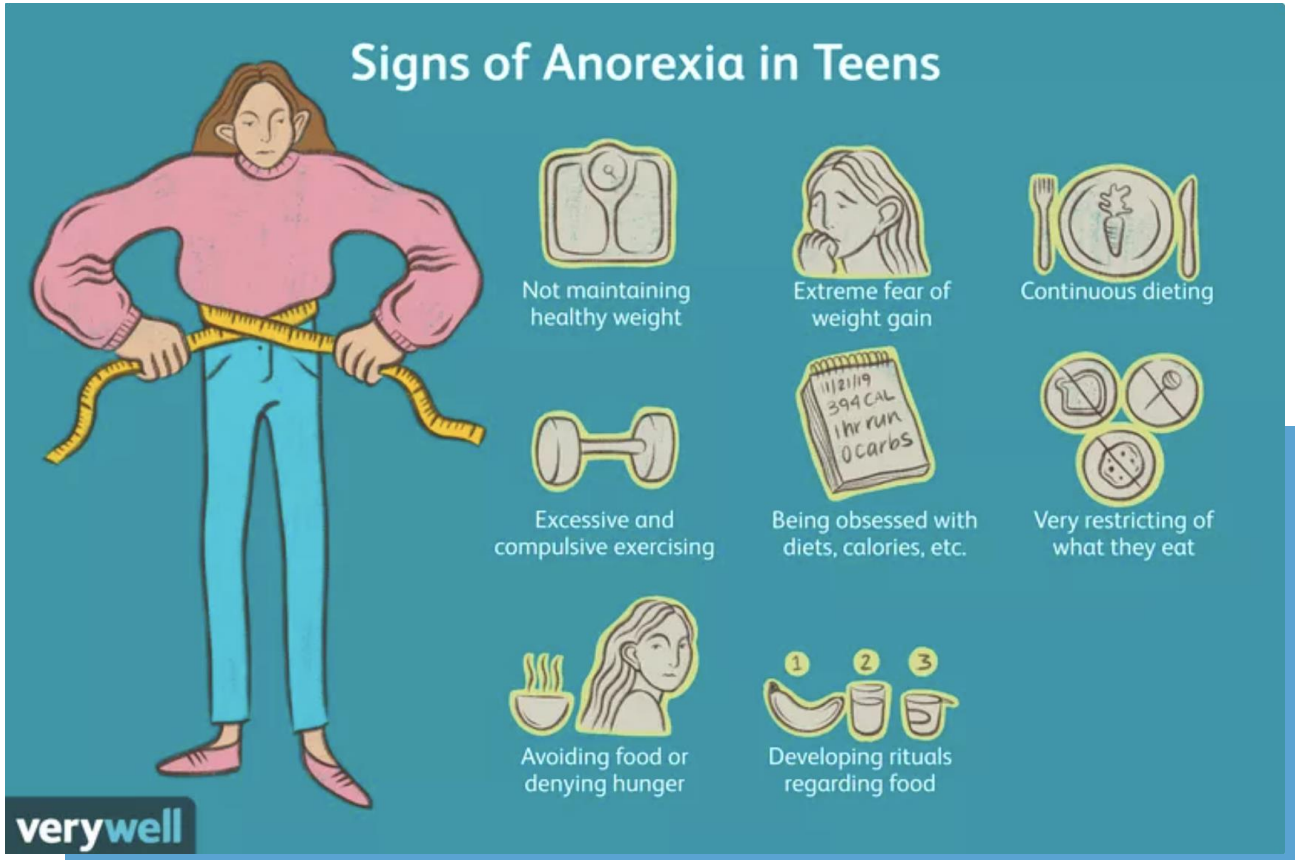
- Depressed mood, social withdrawal, irritability
- Insomnia
- Diminished libido
- Preoccupied with thoughts of food
- Feelings of ineffectiveness and poor self-esteem
- Limited social spontaneity and inflexible thinking
- Restrained emotional expression
- Frequent mirror gazing
- Follows comments of others
- "Weight loss talk"
- Wear baggy or layered clothing



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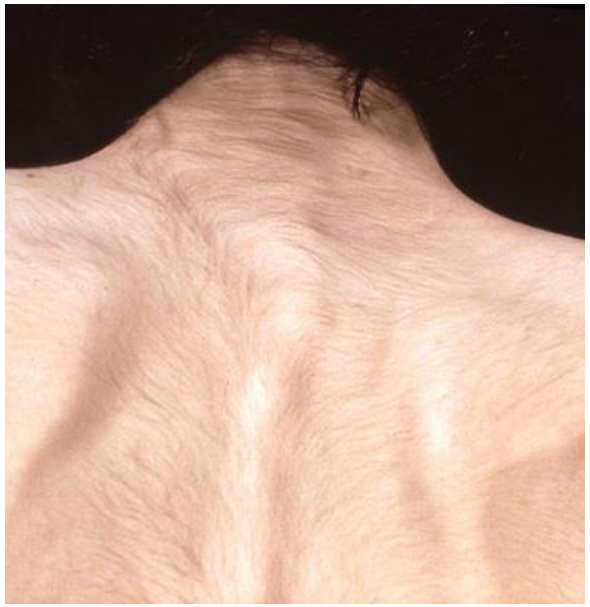
Cachexia

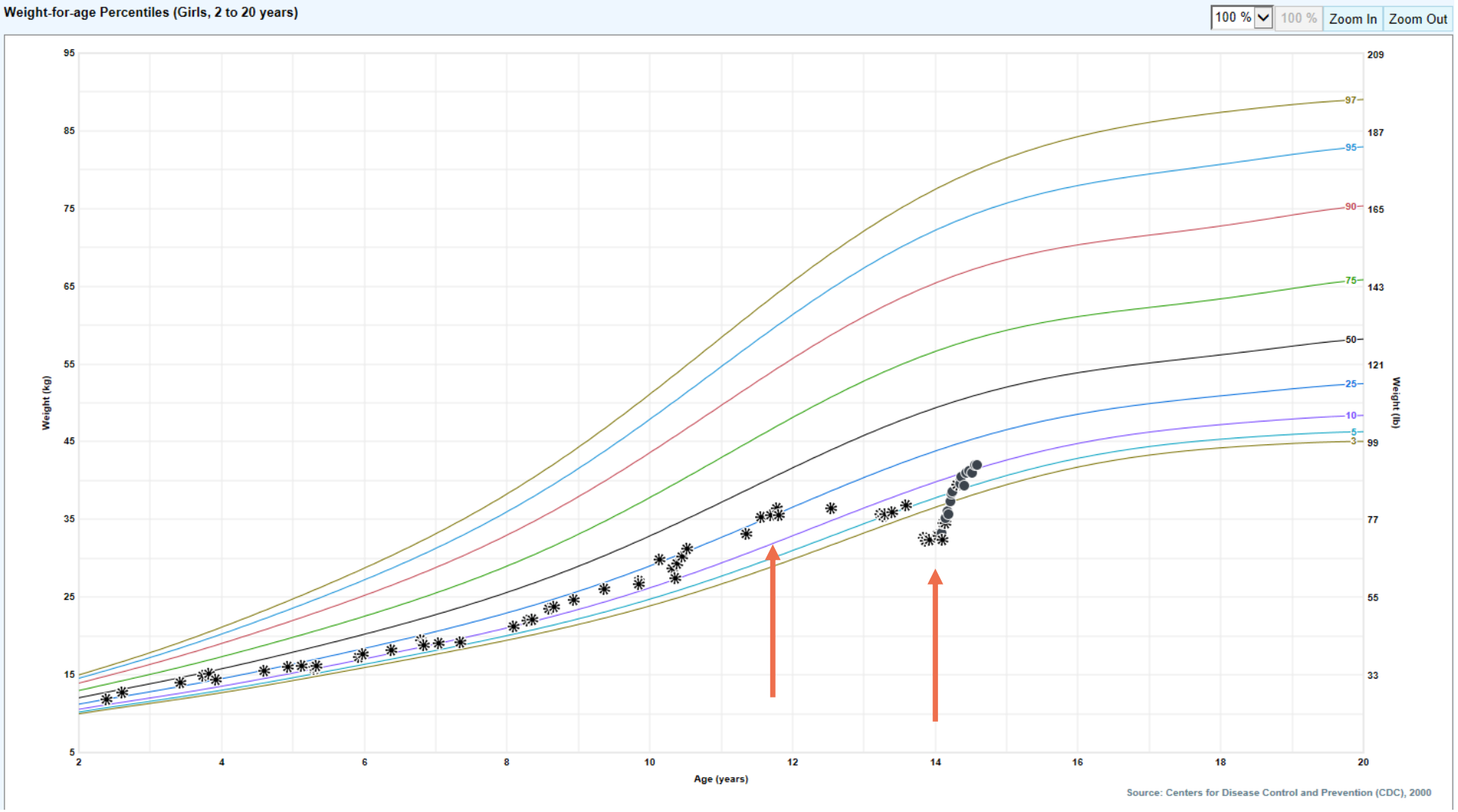
Telogen effluvium



Lanugo

Clinical Presentations of Anorexia Nervosa

GROWTH CHARTS



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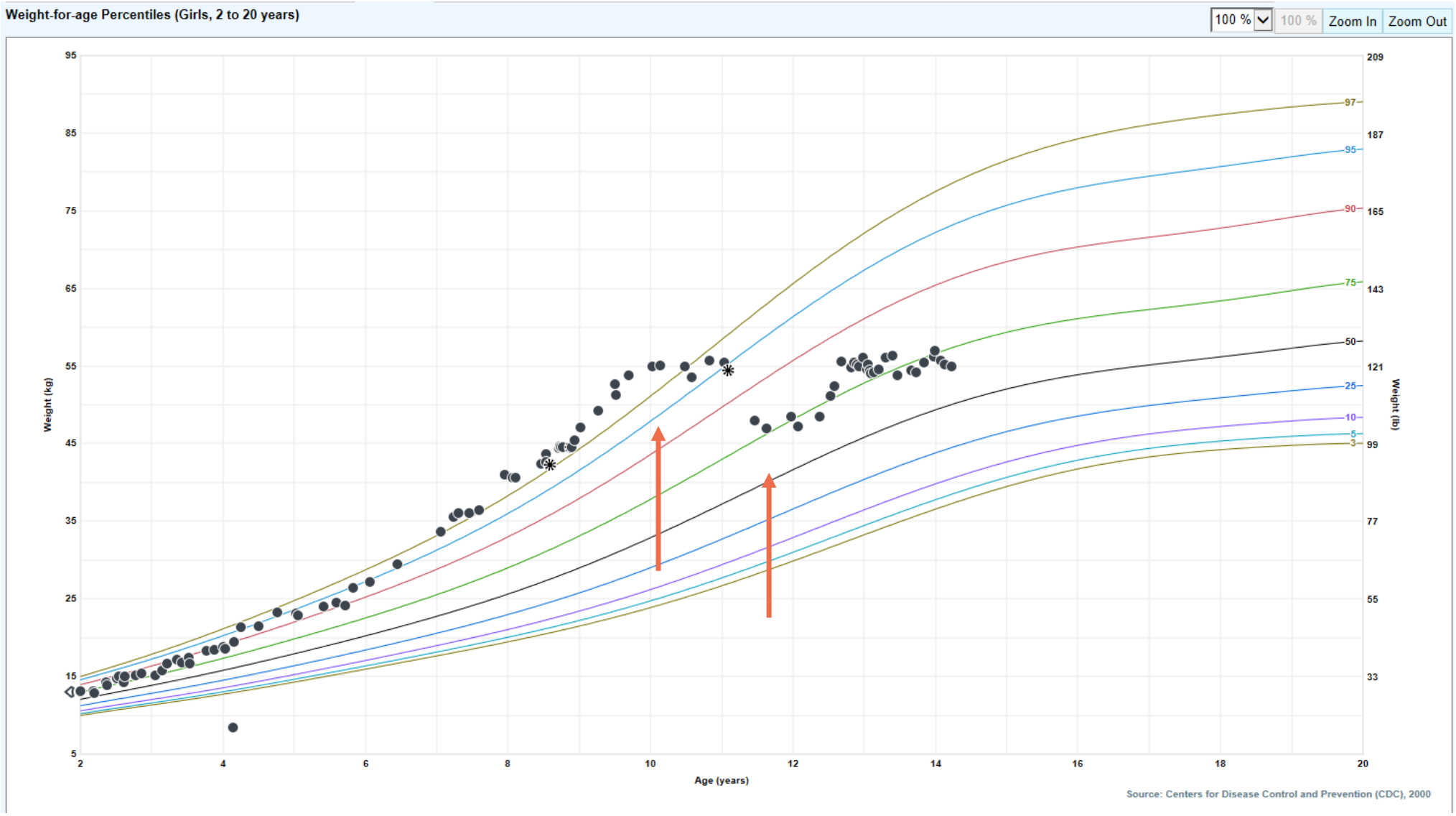
Growth Charts



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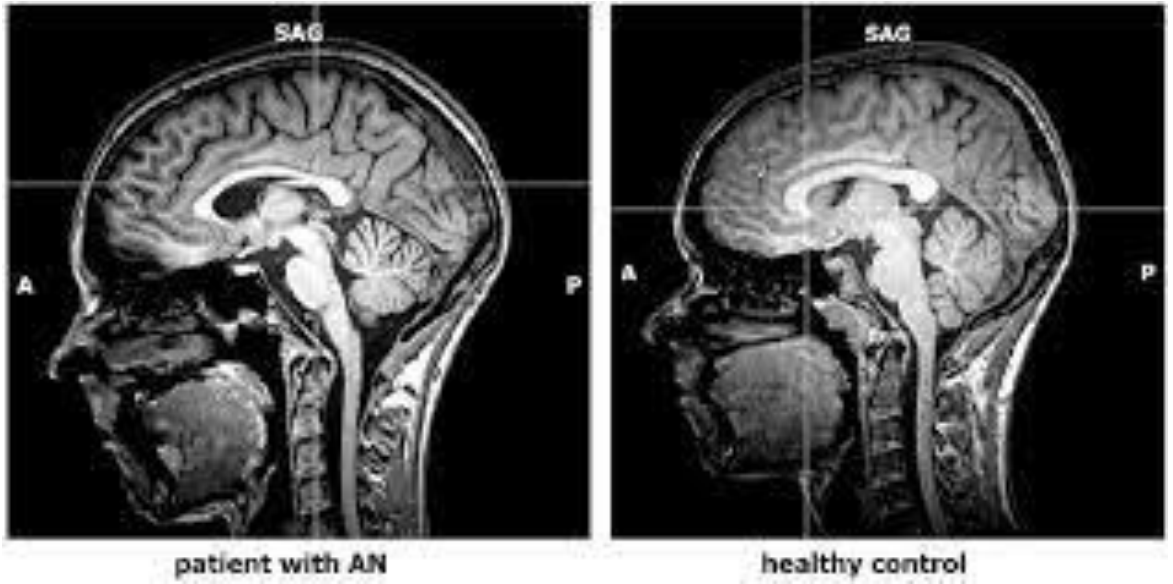
Clinical Presentation of Anorexia Nervosa

Ono T, Kasaoka S, Fujita M, et al. Complete recovery from severe myocardial dysfunction in a patient with anorexia nervosa. *J Cardiol*. 2009;54(3):480-484. doi:10.1016/j.jjcc.2009.02.016

- Cardiovascular:
  - Myocardial atrophy
  - Hypotension
  - Orthostasis
  - Syncope
  - Rhythm disturbances

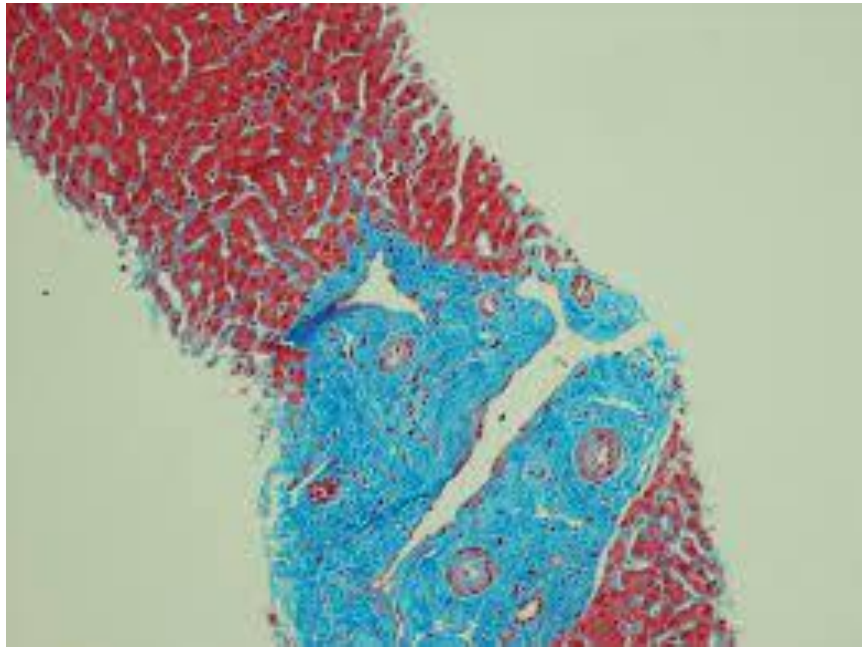
Clinical Presentation of Anorexia Nervosa



Seitz J, Bühren K, von Polier GG, Heussen N, Herpertz-Dahlmann B, Konrad K. Morphological changes in the brain of acutely ill and weight-recovered patients with anorexia nervosa. A meta-analysis and qualitative review. *Z Kinder Jugendpsychiatr Psychother*. 2014;42(1):7-18. doi:10.1024/1422-4917/a000265

- Neurologic:
  - Cerebral Atrophy
  - Peripheral Neuropathy

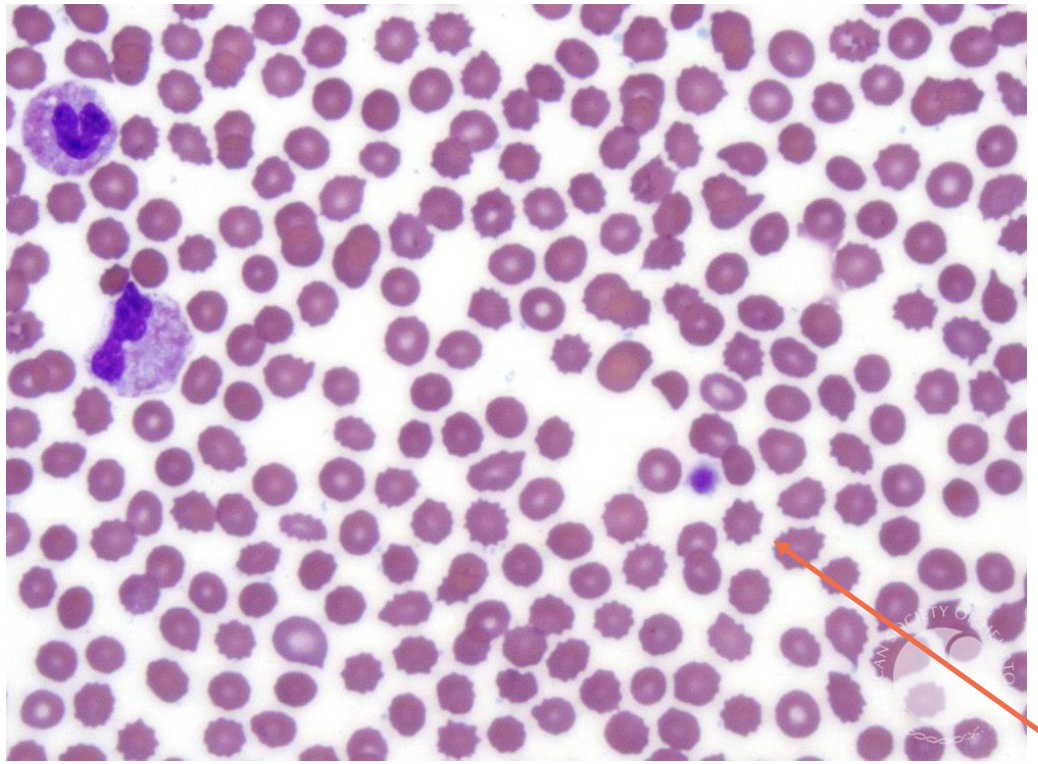
Clinical Presentation of Anorexia Nervosa



Massoud OI, Crowe DR. Acute Liver Injury Associated with Anorexia Nervosa. *Journal of Gastroenterology and Hepatology Research* 2017; **6(6)**: 2498-2501 Available from: URL: http://www.ghrnet.org/index.php/joghr/article/view/2158

- Gastrointestinal:
  - Constipation
  - Nausea
  - Delayed gastric emptying
  - Hepatitis
  - Pancreatitis

Clinical Presentation of Anorexia Nervosa



Burr Cell

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- Hematologic
  - Anemia
  - Thrombocytopenia
  - Leukopenia
  - Bleeding diatheses

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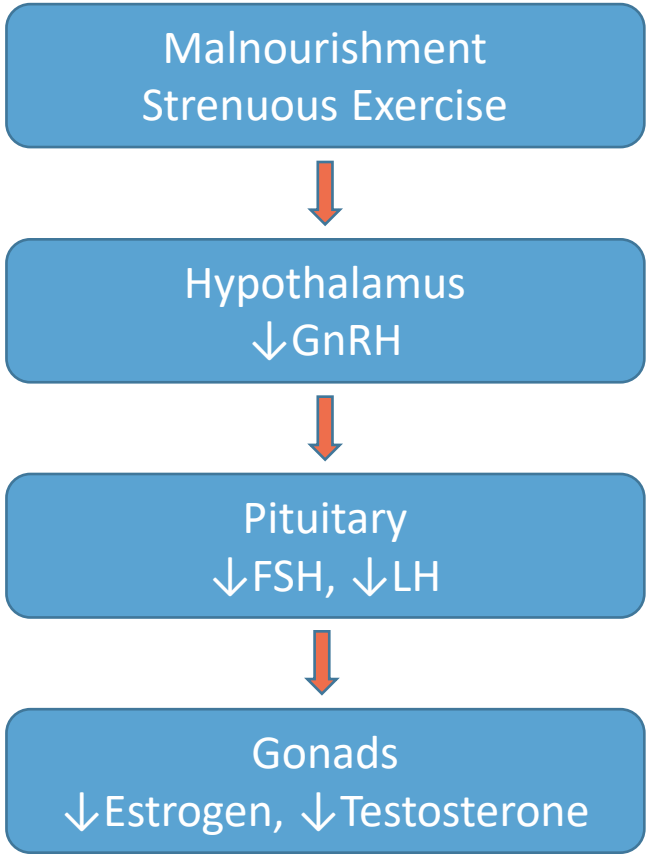
Clinical Presentation of Anorexia Nervosa



- Endocrine:
  - Pubertal stall
  - Shorter stature than expected
  - Amenorrhea and Oligomenorrhea
  - Fatigue

Clinical Presentation of Anorexia Nervosa

Fracture

- Skeletal:
  - Osteopenia
  - Osteoporosis
  - Recurrent fractures

Carpintero P, Lopez-Soroche E, Carpintero R, Morales R. Bilateral insufficiency fracture of the femoral neck in a male patient with anorexia nervosa. *Acta Orthop Belg*. 2013;79(1):111-113.

Lab Findings of Anorexia Nervosa

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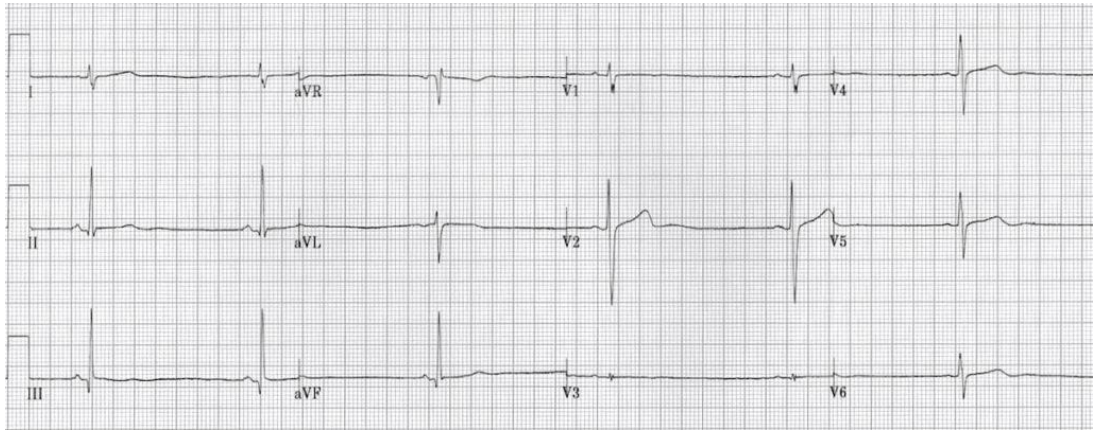
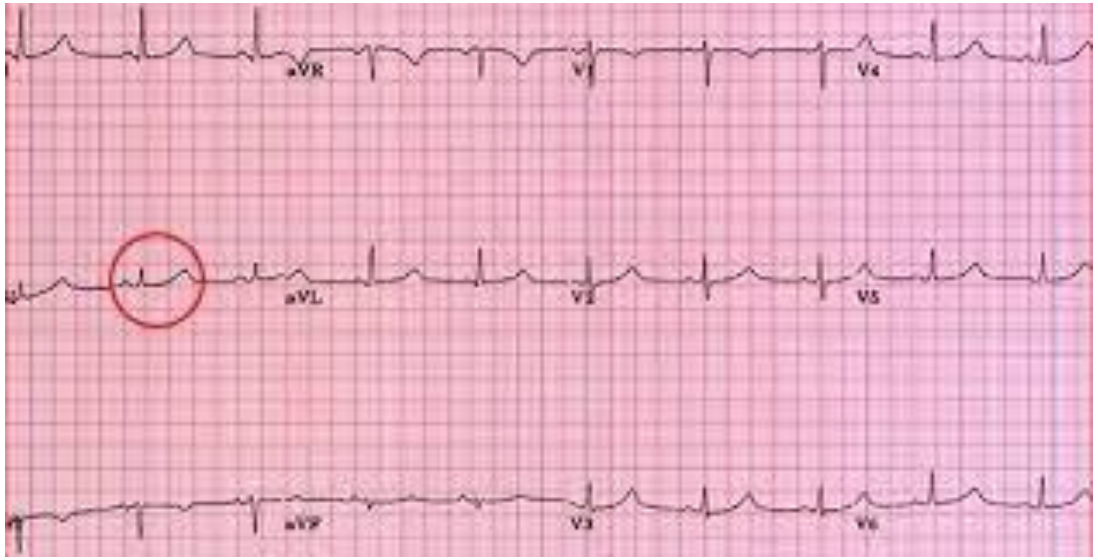
CBC	Leukopenia, anemia, and thrombocytopenia
Metabolic Panel	Hypokalemia, hyponatremia, hypophosphatemia, hypomagnesemia, hypocalcemia, hypoglycemia, elevated BUN/Cr, metabolic alkalosis
Thyroid Studies	TSH normal, T4 normal, T3 low
Hypothalamic-Pituitary-Gonadal/Adrenal Axis	Decreased IGF-1, decreased LH and FSH, decreased Estradiol (<30 pg/ml)/testosterone, Cortisol normal to elevated
Inflammatory Markers	Decreased C3 and ESR
Amylase	Elevated with emesis
LFTs	Mildly elevated
UA	Ketonuria

EKG Findings of Anorexia Nervosa



Sinus Bradycardia



Prolonged QTc

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Epidemiology of Eating Disorders

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Anorexia Nervosa

Lifetime Prevalence Females: 0.9%

Lifetime Prevalence Males: 0.3%

Bulimia Nervosa

Lifetime Prevalence Females: 1.5%

Lifetime Prevalence Males: 0.5%

Bulimia Nervosa

1.) Recurrent episodes of binge eating

2.) Recurrent inappropriate compensatory behaviors to prevent weight gain

3.) Binging and compensatory behaviors both occur at least once a week for at least 3 months

4.) Self-evaluation is unduly influenced by body shape and weight

5.) The disturbance does not occur exclusively during periods of anorexia nervosa

- Mild: 1-3 episodes a week
- Moderate: 4-7 episodes a week
- Severe: 8-13 episodes a week
- Extreme: 14 or more episodes a week

What is a Binge?

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Drivers of Binge Eating Behavior

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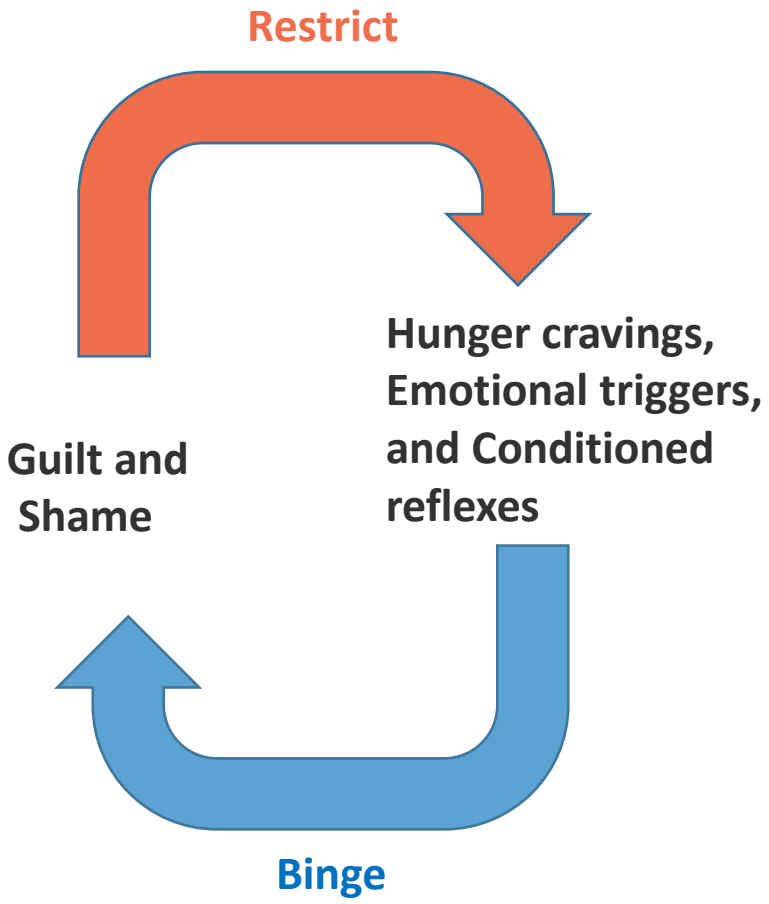
- Hunger
- Distressed Mood
- Habit patterns



Purge

- Vomiting is the most common purging method
- May also take laxatives, diuretics, syrup of ipecac, caffeine, natural supplements, stimulants, and enemas
- May take thyroid hormone or if Type I DM may reduce insulin doses
- Excessive exercise or fasting

Manifestations of Bulimia Nervosa

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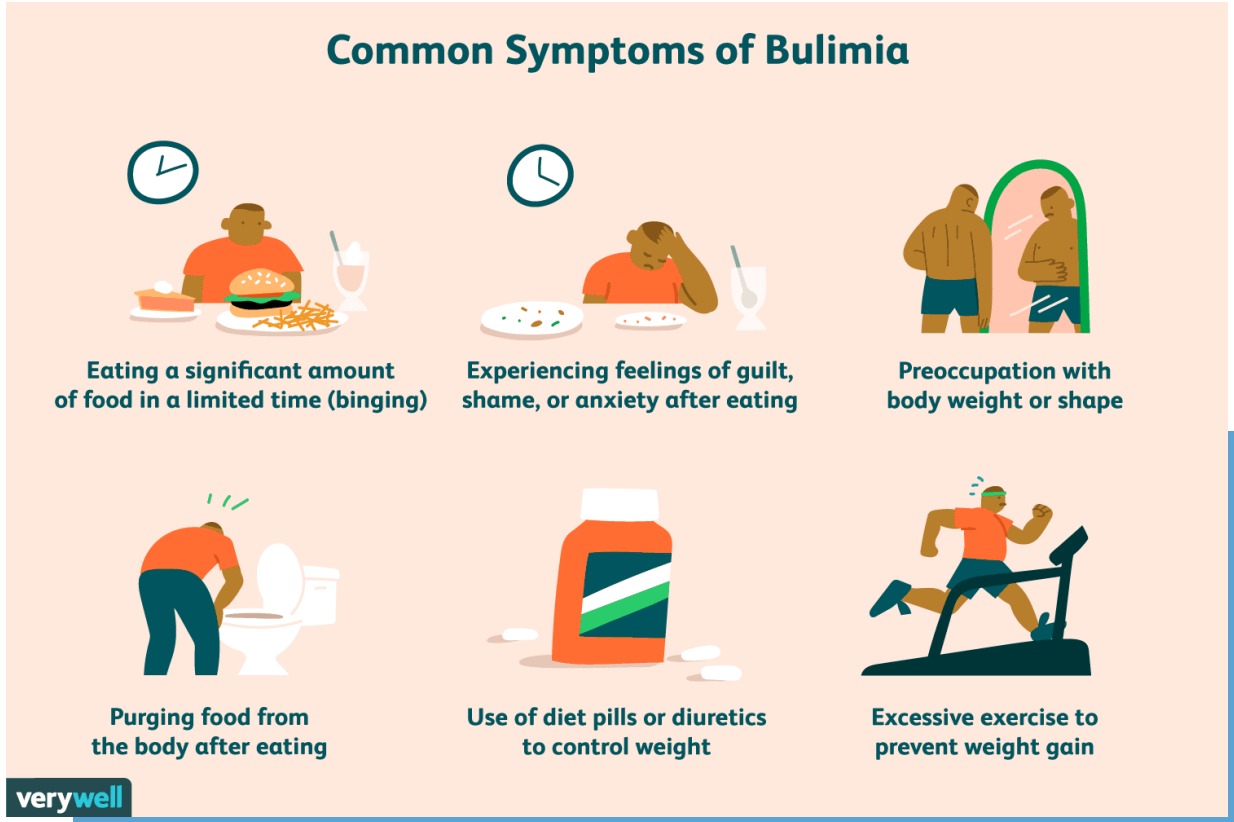
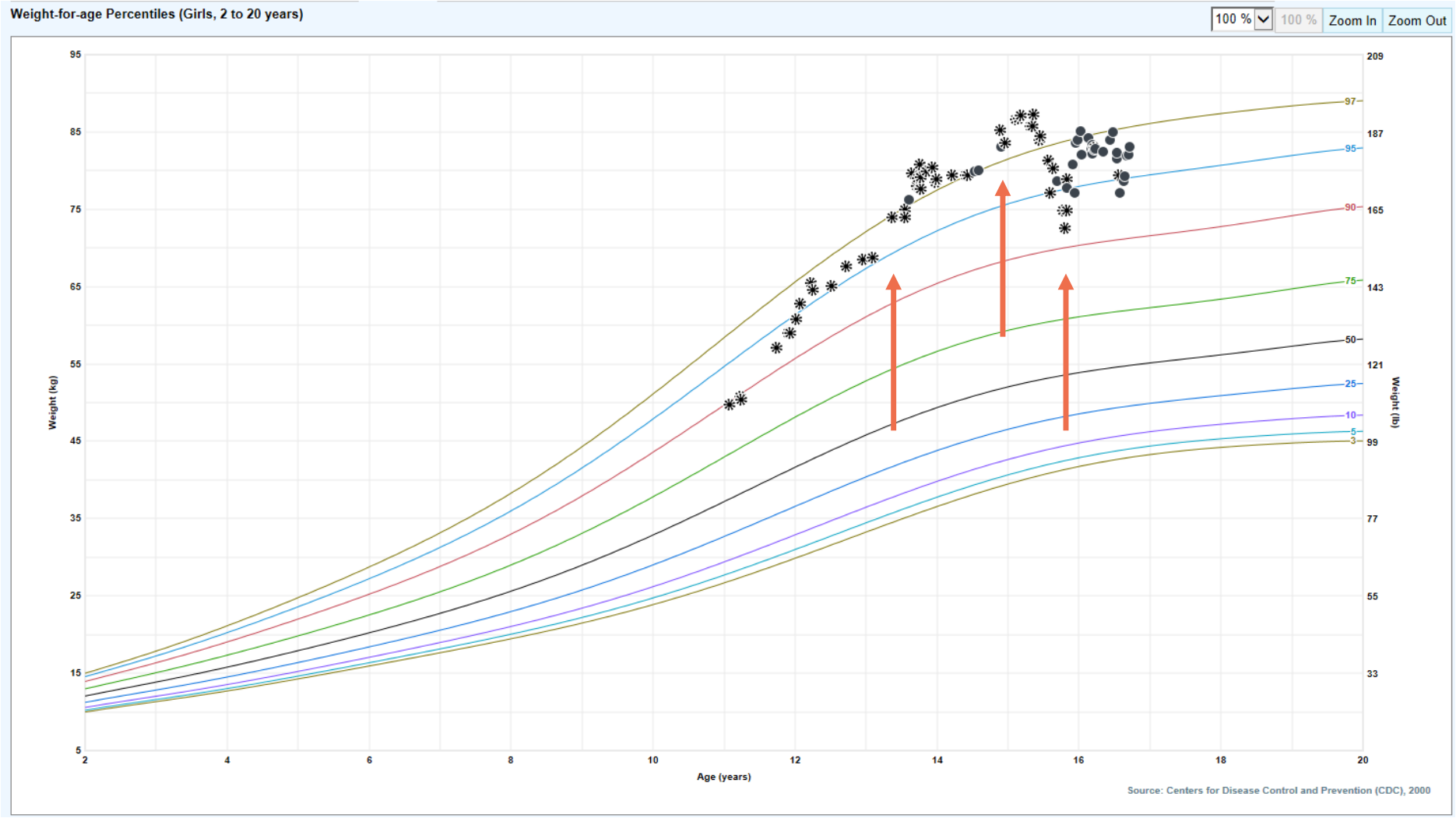
- Drastic mood lability
- New, high intensity work outs
- New fad diets and fasting attempts
- Fluctuations in weight
- Frequent bathroom trips, often after eating
- Odor of vomit
- Hidden wrappers or containers
- Stealing, hoarding, or hiding food
- Eating in secret, or at odd times
- Hidden laxatives, diet pills, etc



Growth Charts



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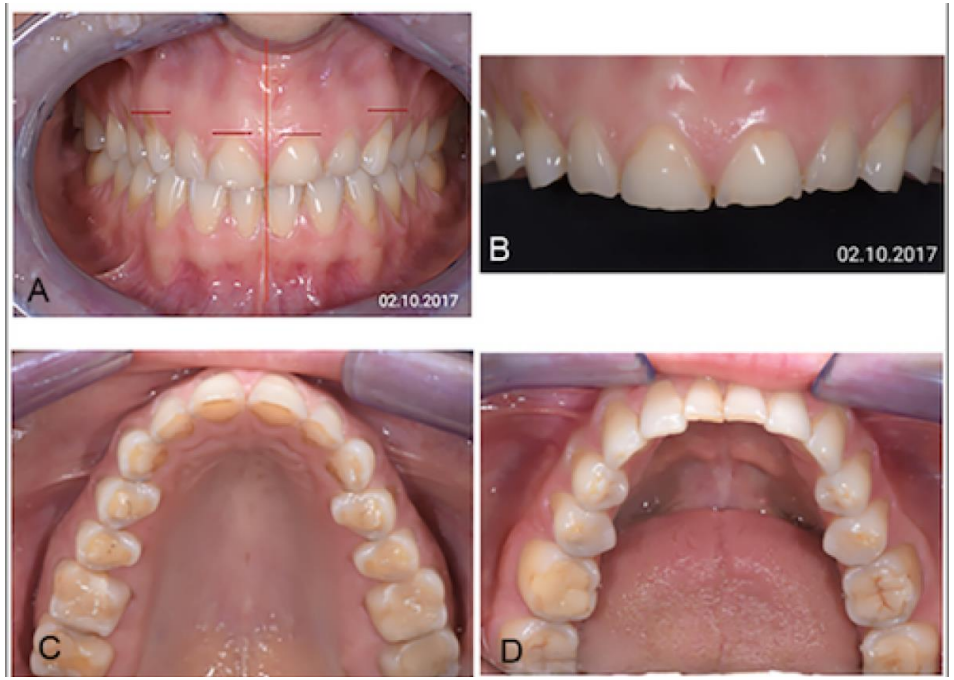
Sialadenosis



Dental Erosion

Russel's Sign

Clinical Presentations of Bulimia Nervosa

Clinical Presentation of Bulimia Nervosa

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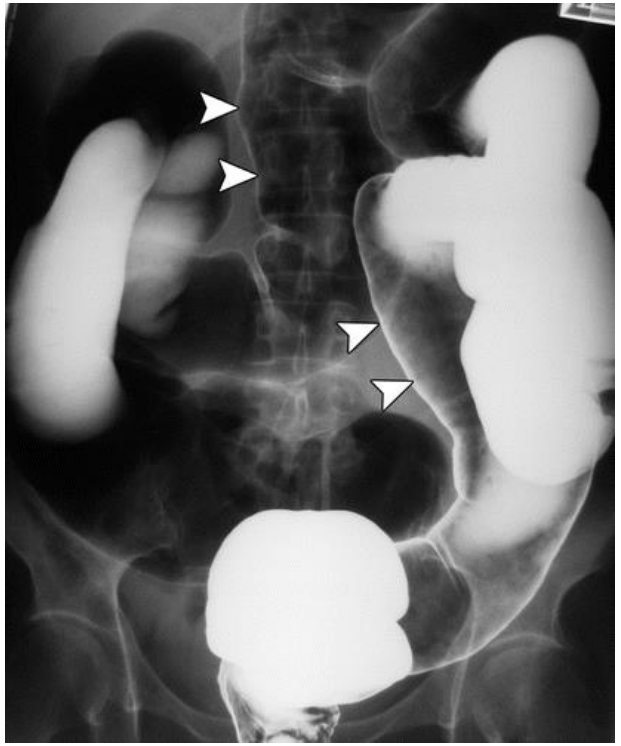

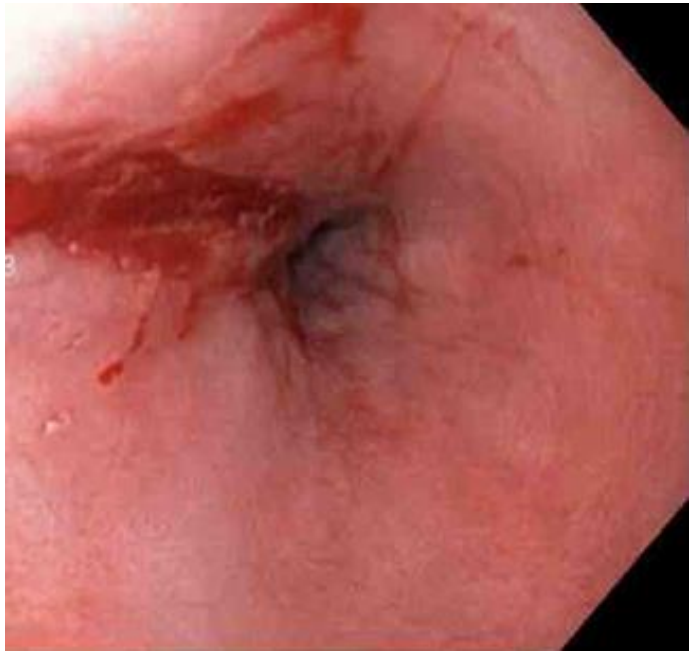

- Gastrointestinal
  - Mallory-Weiss tears
  - Cathartic Colon
  - Rectal Prolapse

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Lab Findings of Bulimia Nervosa

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Metabolic Panel	Hypokalemia, hypochloremia, hyponatremia, hypophosphatemia, hypomagnesemia, Metabolic alkalosis with elevated bicarb (vomiting), Metabolic acidosis (laxatives and diuretics), Elevated BUN/Cr
Amylase	Elevated with emesis
Lipase	Normal

Epidemiology of Eating Disorders

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Anorexia Nervosa

Lifetime Prevalence Females: 0.9%

Lifetime Prevalence Males: 0.3%

Bulimia Nervosa

Lifetime Prevalence Females: 1.5%

Lifetime Prevalence Males: 0.5%

Binge Eating Disorder

Lifetime Prevalence Females: 3.5%

Lifetime Prevalence Males: 2.0%

Binge-eating Disorder

1.) Recurrent episodes of binge eating

- Eating, in a discrete period of time (2-hours), an amount of food that is definitely larger than what most people would eat in similar circumstances
- A sense of lack of control over-eating during the episodes

2.) The binge-eating episodes are associated three (or more) of the following:

- Eating much more rapidly than normal
- Eating until feeling uncomfortably full
- Eating large amounts of food when not feeling physically hungry
- Eating alone because of feeling embarrassed by how much one is eating
- Feeling disgusted with oneself, depressed, or guilty afterward

3.) Binging occurs approximately once a week for at least 3 months

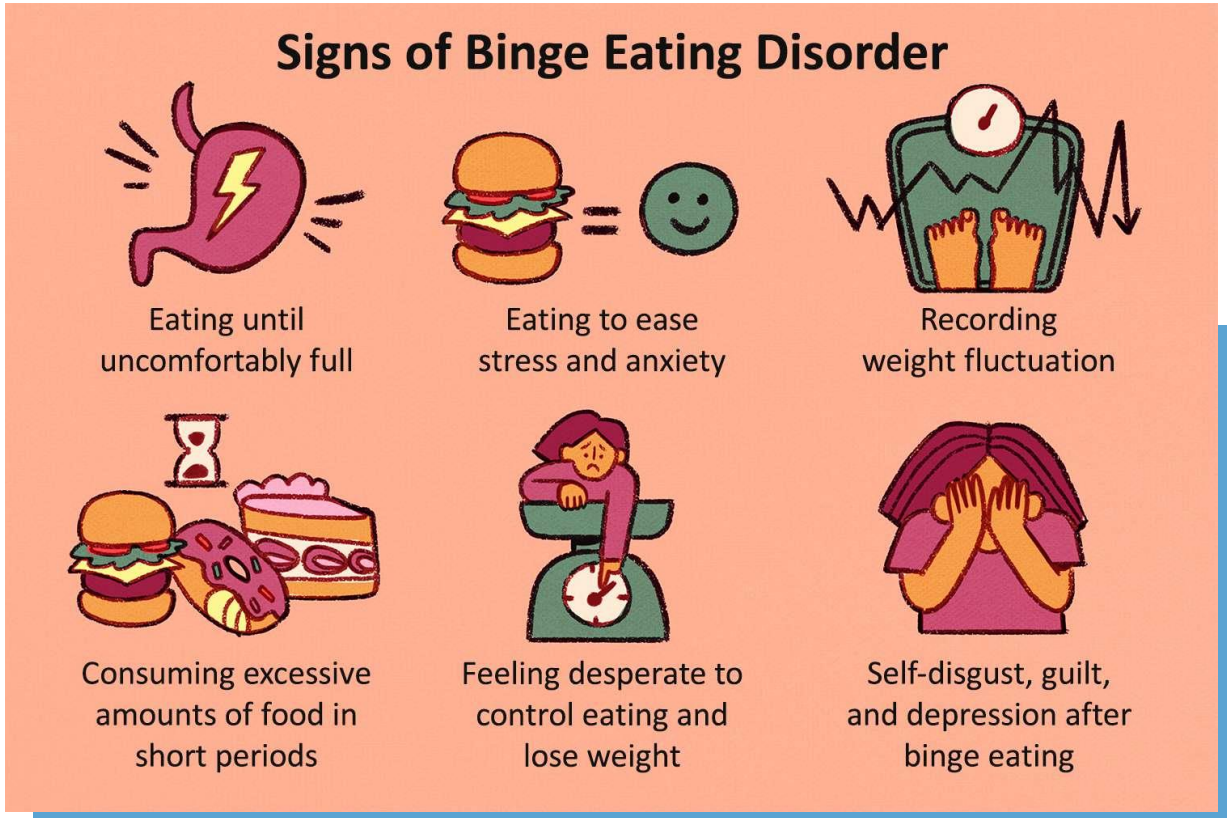
4.) Marked distress regarding binge eating is present

5.) The binge eating is not associated with the recurrent use of inappropriate compensatory behavior as in bulimia nervosa and does not occur exclusively during the course of anorexia nervosa or bulimia nervosa

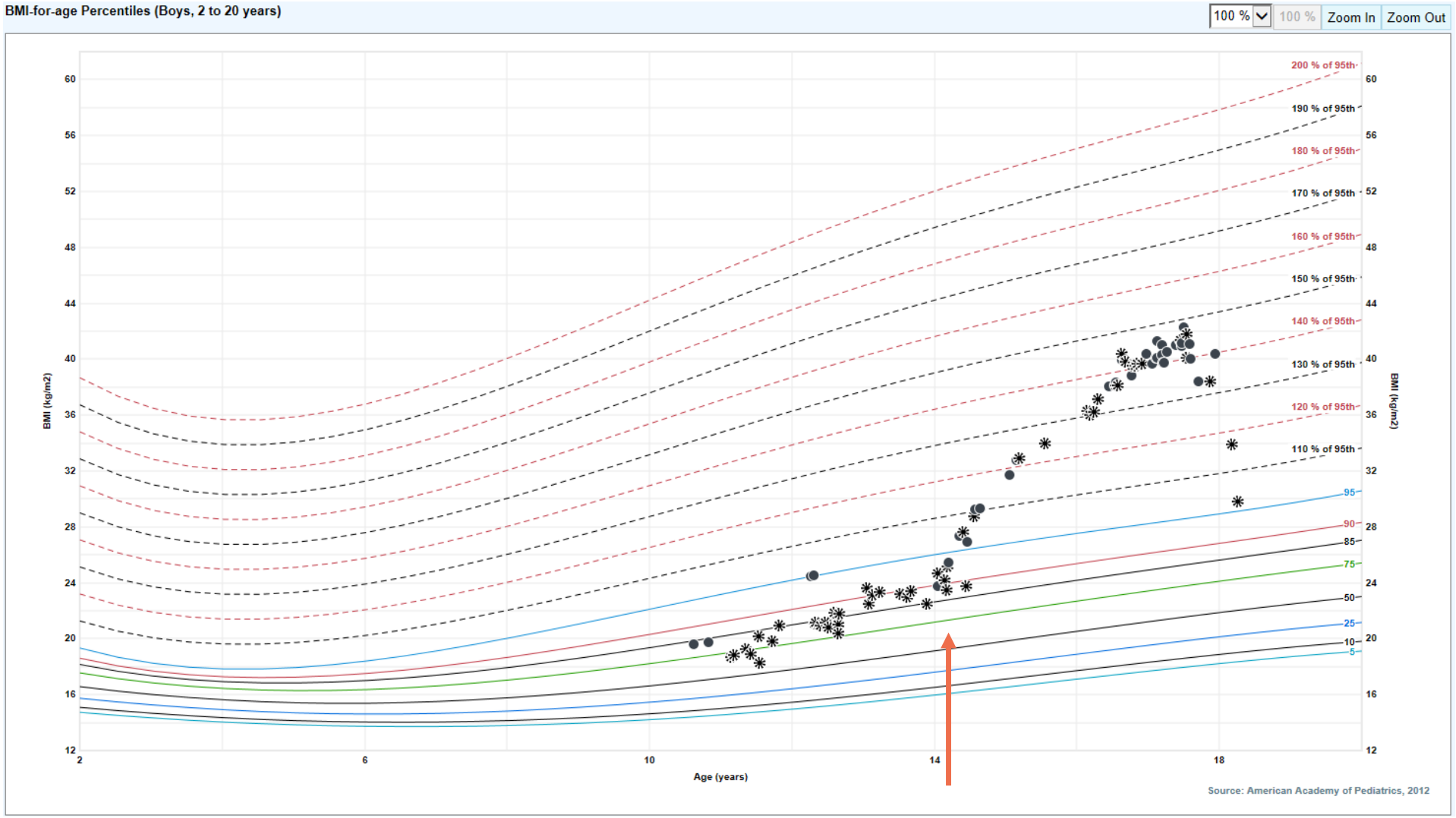
- Mild: 1-3 episodes a week
- Moderate: 4-7 episodes a week
- Severe: 8-13 episodes a week
- Extreme: 14 or more episodes a week

Manifestations of Binge Eating Disorder

- New fad diets and fasting attempts
- Rapid weight gain
- Continued unexplained steady weight gain
- Hidden wrappers or containers
- Stealing, hoarding, or hiding food
- "Stress" eating
- Eating in secret, or at odd times
- Shame or guilt in discussing eating patterns
- Sense of hopelessness about weight



Growth Curves



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Epidemiology of Eating Disorders

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Anorexia Nervosa

Lifetime Prevalence Females: 0.9%

Lifetime Prevalence Males: 0.3%

Bulimia Nervosa

Lifetime Prevalence Females: 1.5%

Lifetime Prevalence Males: 0.5%

Binge Eating Disorder

Lifetime Prevalence Females: 3.5%

Lifetime Prevalence Males: 2.0%

ARFID

Lifetime Prevalence for both Females and Males: 1.5 to 5%

Avoidant/Restrictive Food Intake Disorder

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1.) An eating or feeding disturbance as manifested by persistent failure to meet appropriate nutritional and/or energy needs associated with at least one of the following:

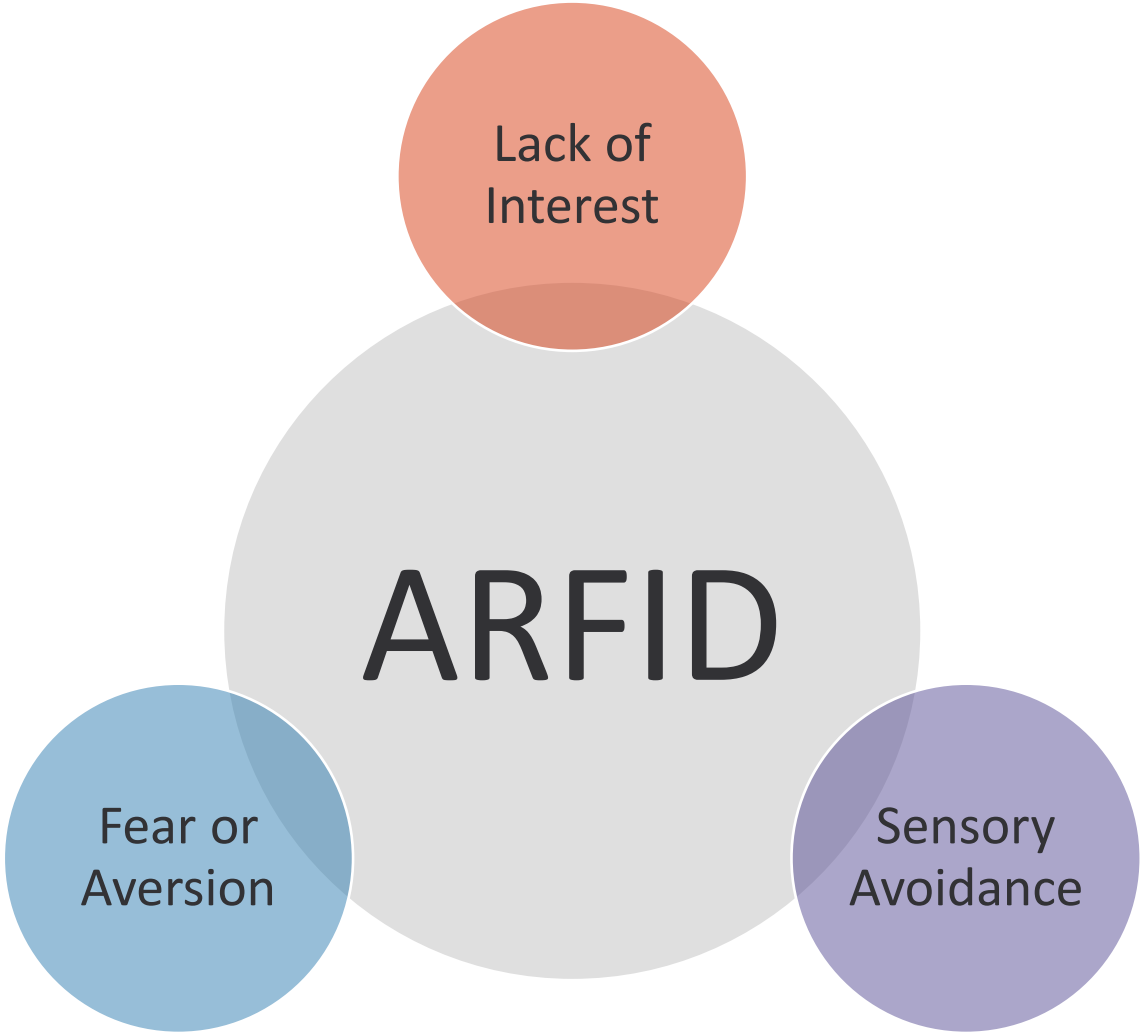
a. Significant weight loss (or failure to achieve expected weight /growth)
b. Significant nutritional deficiency
c. Dependence on enteral feeding or oral nutritional supplements
d. Marked interference with psychosocial functioning

2.) The disturbance is not better explained by lack of available food or by an associated culturally sanctioned practice

3.) The eating disturbance does not occur exclusively during the course of anorexia nervosa or bulimia nervosa, and there is no evidence of a disturbance in the ways in which one's body weight or shape is experienced.

4.) The eating disturbance is not attributable to a concurrent medical condition or not better explained by another mental disorder. When the eating disturbance occurs in the context of another condition or disorder, the severity of the eating disturbance exceeds that routinely associated with the condition or disorder.

Emerging ARFID subtypes



Manifestations of Avoidant/Restrictive Food Intake Disorders

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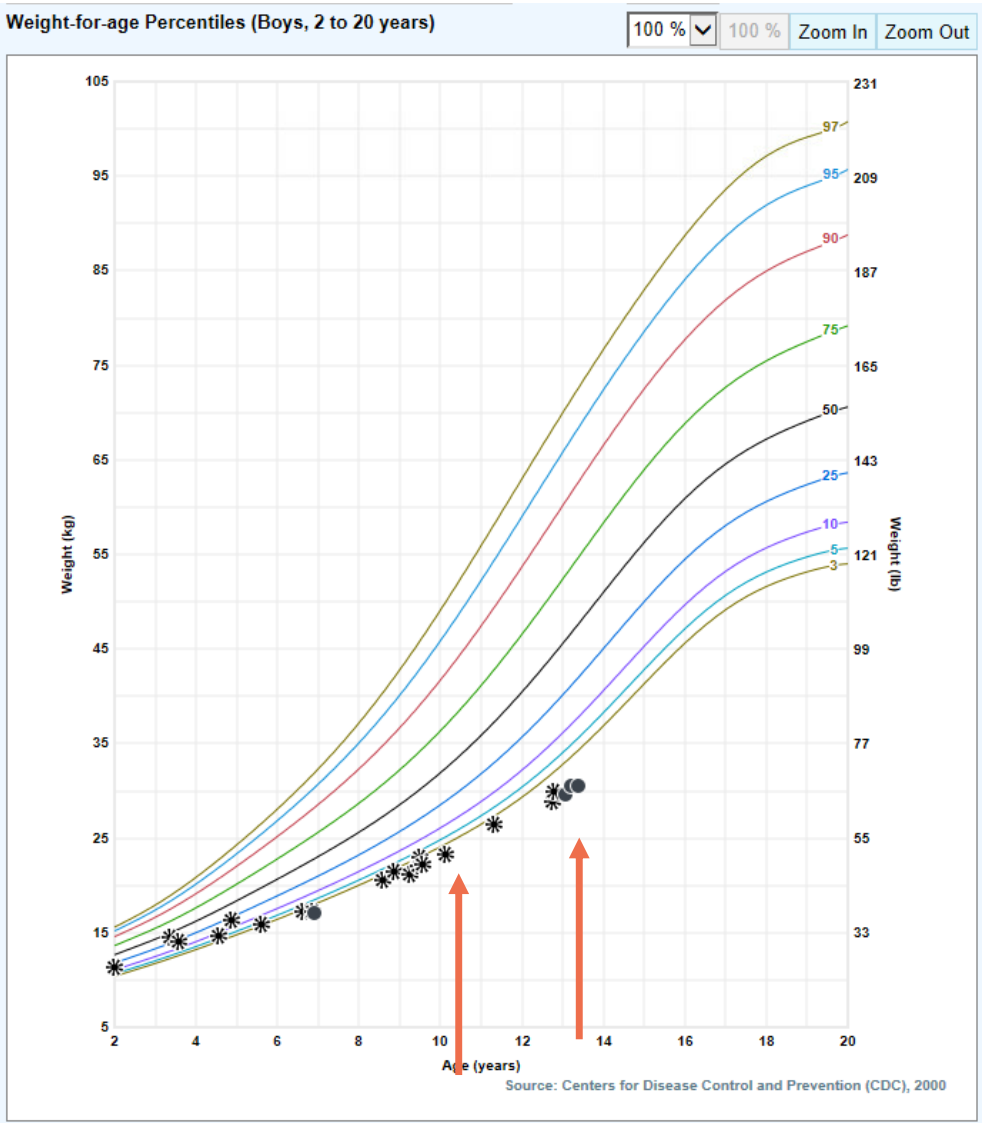
- Overly picky eating in childhood
- Avoidance of certain food groups
- Complaints about texture or taste
- Sudden avoidance or fear of eating
- Limitation of food to liquid forms
- Dependence on nutritional supplements
- Disinterest in eating
- Absence in normal hunger cues
- Unexplained gastrointestinal complaints

Growth Curves



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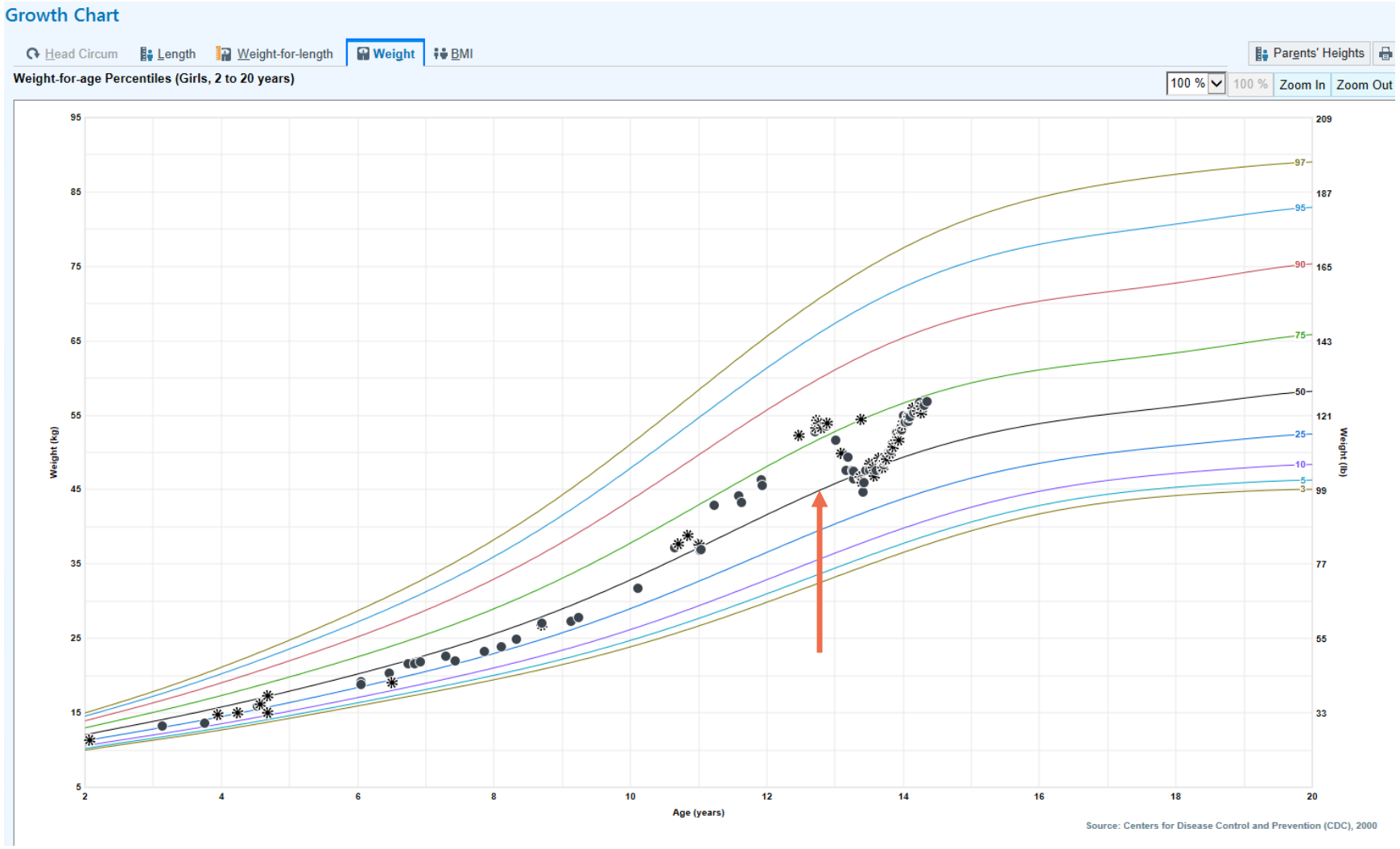
Growth Curves



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Effects of the Pandemic on Eating Disorders

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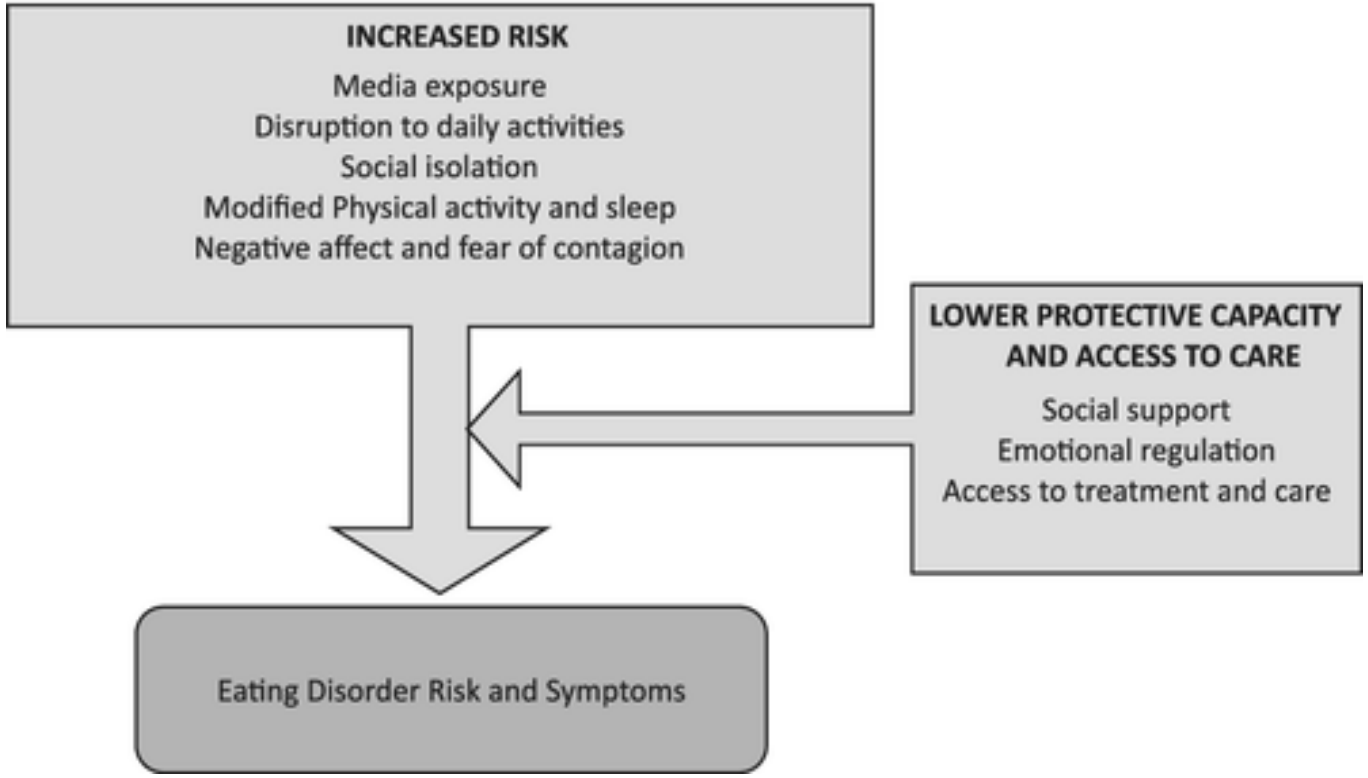

Effects of the Pandemic: Lifestyle Disruption

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Effects of the Pandemic: Mental Health

- Elevated feelings of:
  - Depression
  - Anxiety
  - Panic
  - Boredom
  - Loneliness

- Social Isolation
- Lack of Support System
- Lack of access to Providers

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Effects of the Pandemic: Food Access

- People with an eating disorder have a complex problematic relationship with food which will be enhanced at this time of food insecurity and panic buying.

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Effects of the Pandemic: Media Messaging

- “Quarantine 15”

Yale Medicine

Specialists | Fact Sheets | Departments | Clinical Trials | News | Patient Tools

Doctors & Advice, Family Health

Quarantine 15? What to Do About Weight Gain During the Pandemic

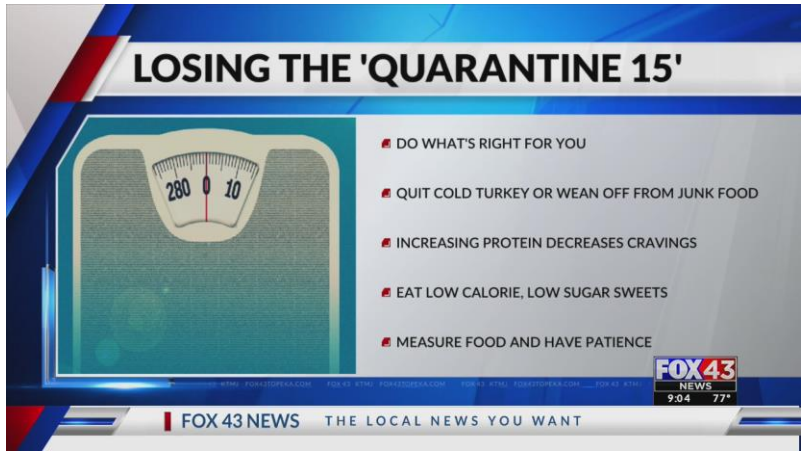
BY KATHY KATELLA JULY 1, 2020

The New York Times

At Home › | Watch: Oscar-Nominated Films | Redefine: Home | Shop: For Newly Wed Parents New | Smoke: Your Own Ham

Don’t Be Ashamed of Those Extra Pounds

So you’ve put on some weight during lockdown. You can obsess over it, but you can also be kinder to yourself. Here’s how.



Effects of the Pandemic: A Reflection

- “For me, grocery shelves becoming empty of my staples caused me great anxiety. ‘How am I going to adapt my eating schedule?’ I asked myself.”
- “Social isolation has meant that there was little available for me in terms of ‘crowding out’ the ED with other meaningful activities.”
- “During this pandemic, I continue to allow myself to count, calculate, and control my eating and exercise. I binge nightly without guilt. I ensure my weight remains healthy and stable, I do not vomit anymore, and I take my medications daily. Maintaining my ED, in as healthful way as possible, is a coping strategy which gives me control during a time when I have lost complete control.”

International Journal of
EATING DISORDERS

BRIEF REPORT | Free Access

Eating and exercise behaviors in eating disorders and the general population during the COVID-19 pandemic in Australia: Initial results from the COLLATE project

Andrea Phillipou, Denny Meyer, Erica Neill, Eric J. Tan, Wei Lin Toh, Tamsyn E. Van Rheenen, Susan L. Rossell

National Center of Excellence for Eating Disorders

Results for the Eating Disorder Group

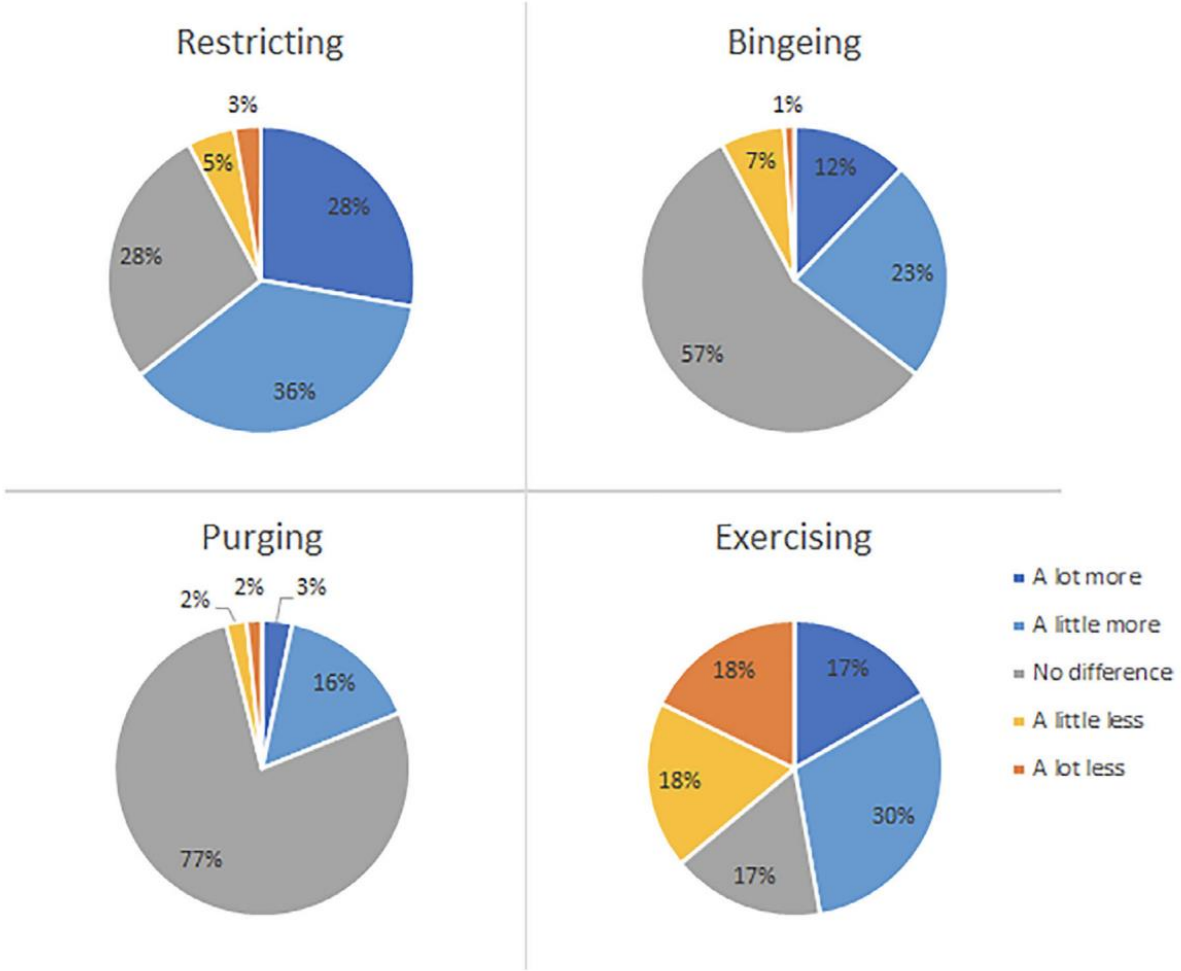


FIGURE 1 Eating and exercise behaviors in the eating disorder group (n = 180) in the past week compared to before the COVID-19 pandemic [Color figure can be viewed at wileyonlinelibrary.com]

Results for the General Group

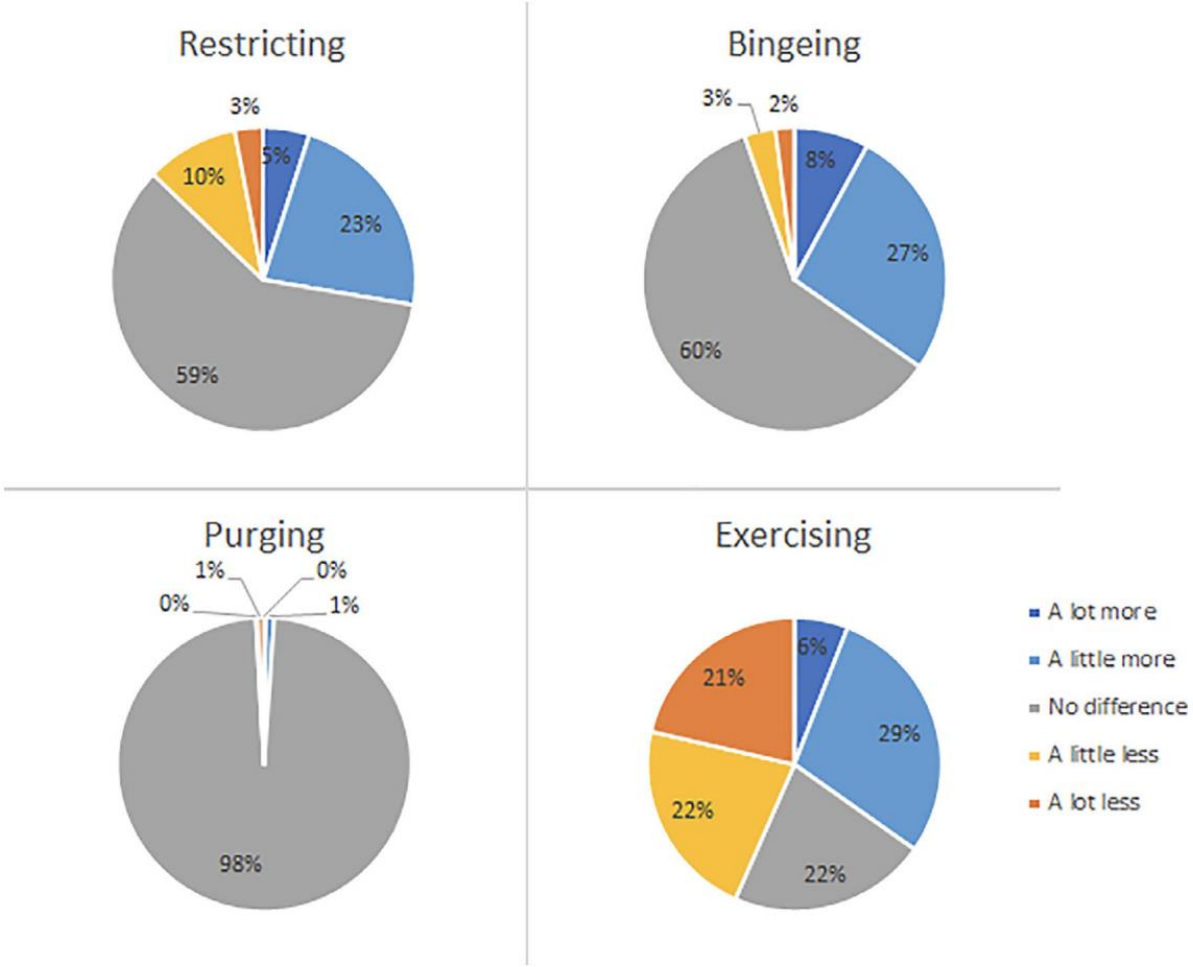


FIGURE 3 Eating and exercise behaviors in the general population (n = 5,289) in the past week compared to before the COVID-19 pandemic
[Color figure can be viewed at wileyonlinelibrary.com]

Findings

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- These findings are particularly important as they suggest that even in the early stages of the pandemic, people with an existing eating disorder were already reporting changes in eating and exercise behaviors that may be reflective of an exacerbation of disordered eating symptoms
- These findings also suggest increased rates of disordered eating behaviors and changes to exercise behaviors among the general population in the early stages of the pandemic, which may lead to important negative physical health implications if these behaviors continue through the pandemic

International Journal of
EATING DISORDERS

ORIGINAL ARTICLE | Open Access

Eating disorders in times of the COVID-19 pandemic—Results from an online survey of patients with anorexia nervosa

Sandra Schlegl PhD, Julia Maier MSc, Adrian Meule PhD, Ulrich Voderholzer MD

First published: 25 August 2020 | https://doi.org/10.1002/eat.23374 | Citations: 4

Action Editor:: Ruth Weissman

- 70% of patients reported that eating, shape, and weight concerns, drive for physical activity, loneliness, sadness, and inner restlessness increased during the pandemic.
- Access to in-person psychotherapies decreased by 37%
- Visits at the general practitioner (including weight checks) decreased 46%
- Videoconference therapy was used by 26% and telephone contacts by 35% of patients.

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TABLE 2. Impact of the COVID-19 pandemic on patients with anorexia nervosa

Overall impact	Strongly agree %	Agree %	Undecided %	Disagree %	Strongly disagree %
Worsening of eating disorder symptomatology	20.1	21.4	25.2	16.4	17.0
New symptoms	7.5	12.6	14.5	25.2	40.3
Worsening of quality of life	20.1	31.4	21.4	15.1	11.9
Impairment of therapy	13.2	14.5	20.8	28.9	22.6

Findings

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- A substantial subset of patients reported an increase in ED cognitions and drive for physical activity. Although the data are cross-sectional and preclude discussion of temporal or causal relationships, they hypothesized that increased symptoms of depression and anxiety experienced during the pandemic may have contributed
- Many patients also indicated that symptoms of depression and anxiety increased during the COVID-19 pandemic. These results are in line with previous studies that have shown increases in symptoms of depression and anxiety, and loneliness in the general population
- Regarding health services used during the pandemic, they found a decreased access to in-person psychotherapy, but only a third of patients with AN used videoconference therapy and/or online interventions

JOURNAL OF
ADOLESCENT HEALTH
Improving the Lives of Adolescents and Young Adults
SAHM

ORIGINAL ARTICLE | VOLUME 68, ISSUE 2, P277-283, FEBRUARY 01, 2021

Eating to Cope With the COVID-19 Pandemic and Body Weight Change in Young Adults

Tyler B. Mason, Ph.D. • Jessica Barrington-Trimis, Ph.D. • Adam M. Leventhal, Ph.D.

Published: December 05, 2020 • DOI: https://doi.org/10.1016/j.jadohealth.2020.11.011 • Check for updates

1,820 participant were analyzed

- 31% (n=563) reported overeating to cope with the pandemic
- 35% (n=637) reported unhealthy food intake to cope with the pandemic
- 18% reported both overeating and eating unhealthy foods

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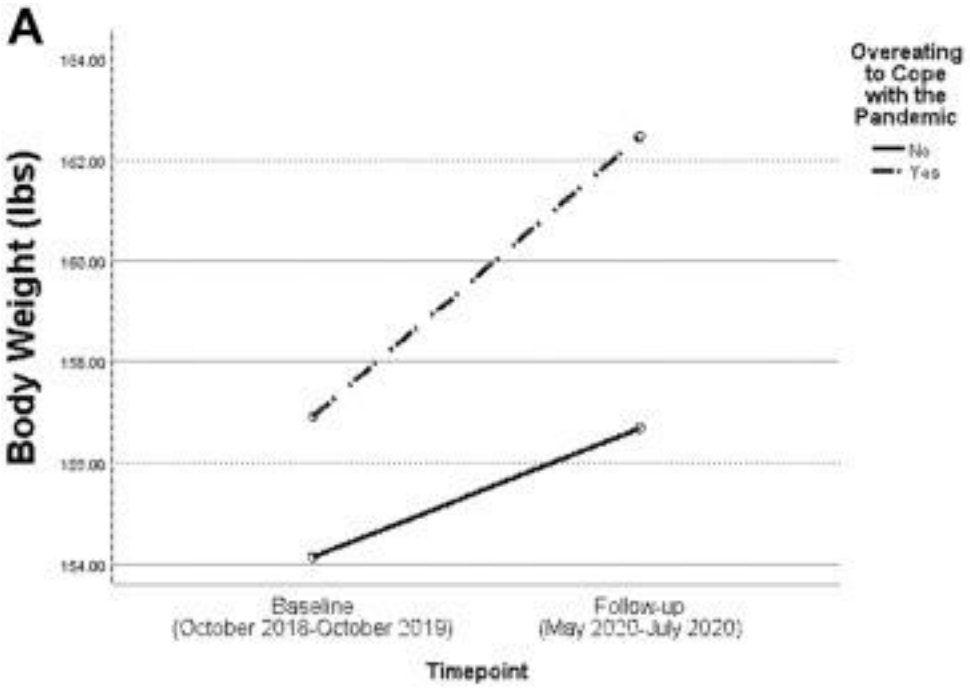

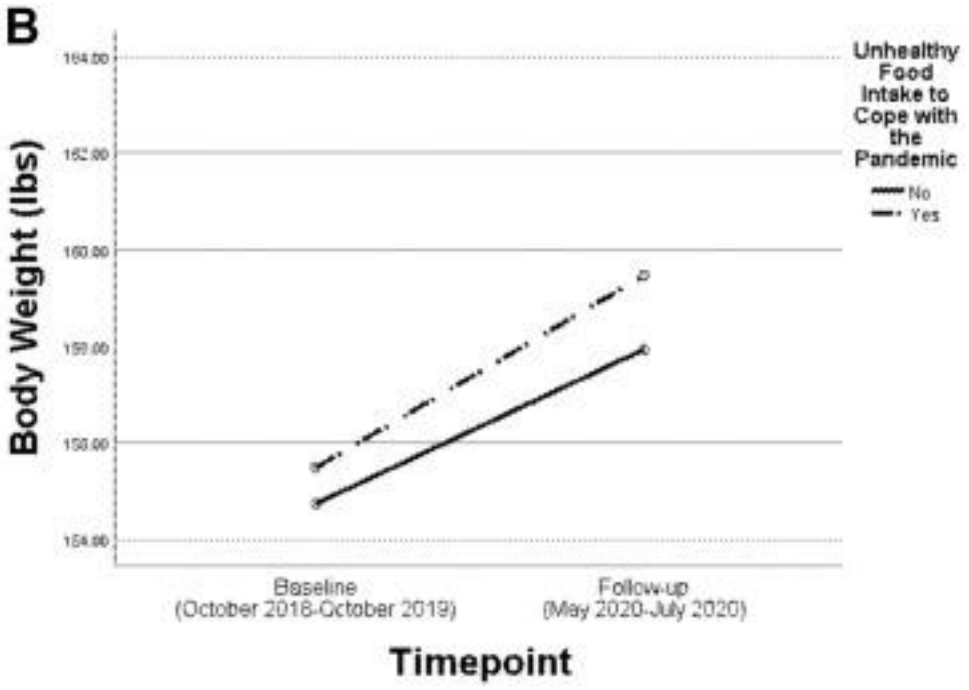

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for Eating Disorders

Thank you!

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